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MONTHLY REPORT

OF

THE AGRICULTURAL DEPARTMENT

FOR

APRIL AND MAY,

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MONTHLY REPORT.

DEPARTMENT OF AGRICULTURE,
Washington, May, 1865.

The present report is for both the months of April and May. There could not be published a separate one for April, for during the session of Congress the pressure on the public printing caused a delay in the winter reports, and when it was expected to make up this delay by an early publication in April, the national rejoicing, and, alas! the national sorrow, alike unfitted all for the pursuit of the daily avocations of life, and especially for such labor as is involved in the preparation of the statistical tables of these reports.

No month, or even any year, has ever been so marked in a nation's history as that of last April in our own. A rebellion, greater than the world has ever seen, and involving consequences of greater import to the destinies of the human race than has ever depended on the wars for human rights of any nation during its entire existence, was most triumphantly overcome during that month. The accursed political heresy of the right of State secession, and the no less accursed institution of slavery, were destroyed with the rebellion; but in the hour of our greatest joy, he who had led the nation to this glorious triumph fell by an assassination whose atrocity has excited the indignation of the world. From joy unbounded, the nation passed in a night to the profoundest grief; and this grief has been so feelingly expressed to the Commissioner by his correspondents, that he cannot but return to them his sympathy in all these expressions. The more does he appreciate them, from the fact that his relations to the late President were not only those arising from the official position he held by his kindness, but also from the personal good will he ever experienced from him.

The articles in this report relative to hay-making, and the decrease of cattle and cows, are essentially connected with the chief statistical tables on live stock. The loss of cattle in California and in some parts of Oregon last winter for want of sufficient winter food, as well as the lean and unhealthy condition of farm stock in the Atlantic States so often seen after an unfavorable winter, show how important it is to have sufficient and better winter food for it. It is impossible to estimate the decreased value of hay by improper making, and as this loss can nearly always be avoided, it became the duty of this department to urge farmers to greater care in curing the grasses.

At this time, no subject pertaining to farm management demands more careful consideration than that of the modes by which the diminished live stock can be restored to their numbers in 1861. The increase of cattle and cows is all-important, for the consumption of beef and butter cannot well be lessened; and the constantly increasing demand for butter, as an export, calls on the American

dairy for such measures as will increase its products. The suggestions to be found in the article on this subject should be heeded. The cows must be preserved from slaughter. The inducements to this policy are strengthened by the fact that with every prospect of abundant harvests, and European prices of breadstuffs being very low, and likely to so continue, it will now be more profitable to feed than to sell a portion of the crops, and to give greater attention to pastures and meadows.

This report gives full tables of the *amount*, *prices*, and *value* of the live stock of the loyal States. They are arranged after the manner of the tables for the crops published in the February report. They are the first that so fully set forth the value of the farm stock of each State, and the aggregate value of all. Hereafter like tables for the crops and live stock will be annually given, with such an extension of them as the restored Union will render necessary.

The full statement of the condition of our trade with Canada, under the reciprocity treaty, is also given for 1863 and six months of 1864, taken from the Canadian official reports. All facts showing the true character of this trade cannot but interest most persons, as the period when that treaty will expire is near at hand. In any renewal of it that may take place, the interests of agriculture and manufactures should be better guarded and placed on an equality with other interests of our own and like Canadian interests; otherwise the name of reciprocal has no other purpose than to deceive and insult.

The usual tables of imports and exports will show how greatly our export trade has fallen off in nearly all our agricultural productions. With this decreased foreign demand, and the cessation of that from government occasioned by the war, it cannot be expected that home prices can continue unchanged. The crops of 1865, both at home and abroad, promise an abundant harvest, and should this promise be realized, prices must fall, especially under a continued decline in the value of gold. But no estimate can yet be made of what these crops will be, for they are not free from serious and unfavorable casualties. It is still expected, however, that the summer will show an increased export of our wheats, because their quality is superior, and the recent advance in English prices, although small, indicates that the inferior wheats, which have been weighing down prices, are consumed sufficiently to relieve the markets from their depressing influence.

The wool markets are now attracting much attention, as the time of shearing approaches; and the article in this report as to the future of wool and cotton will not be uninteresting to those engaged in wool production. That this great interest will not soon, if ever, be again subjected to the ruinous adverse influences it has encountered in past years, is therein clearly shown, but what causes may unite to produce a further decline in present prices cannot now be foreseen. The United States Economist, an able paper of New York, cautions farmers against rushing their wool to market as soon as sheared, and urges them "to wash their wool well, and do it up in good shape; that, if thus put up, it will command 50 cents per pound in gold, or its equivalent in currency here, or 50

cents per pound, gold, in England." This advice should be heeded. It is with wool as with all other commodities: those articles that are best prepared for market will prove most lucrative to the producer. The author of "Ten Acres Enough" has shown the results of honest care in such preparation.

It is gratifying to see the interest felt in different parts of Europe in the establishment of a plan for taking the statistics of agricultural production that will give a reliable approximation to the amount of each crop produced, at so early a period after their growth that the producer may be benefited thereby. This can be done only by having these statistics collected and published at short intervals, and before the farmer has disposed of his crops. It is to be much desired that the nations of Europe will establish such a plan, so that the agricultural products of all commercial nations may be made known before they are disposed of and consumed. Statistical tables of this production, collected and published after the crops are consumed, are of no importance to the farmer, and comparatively of little value to any pursuit or individual. The article in this report on the statistics of this department will not be without interest to every occupation.

It is at all times desirable that there should be an abundant crop, for cheap food promotes enterprises of every kind beneficial to the country, and in this way larger amounts of agricultural products are consumed; but at this time, when labor is disorganized in so large a portion of our country, and consequently not producing enough for its own support, it is all-important that abundance should exist, until that labor is again sustaining itself, and meeting the demands for its products. Hence, the tables relating to the present condition of the winter and spring-sown crops will be examined with interest, and the present promise of a most abundant harvest will be regarded with general satisfaction. They will be found near the close of the statistical part of this report.

The department is now receiving samples of excellent wheats and other field seeds, which it is importing from Europe, together with a quantity of Alsike clover-seed, now so much sought for, and, with no unforeseen delay, they will be distributed at a much earlier day than formerly.

Heretofore a brief synopsis of the principal tables of the report has been published for the press, but such synopsis is regarded as unnecessary now, as it will be found in the summary tables, and the report will be much better understood by an examination of the explanations accompanying the tables.

ISAAC NEWTON, *Commissioner.*

THE GRASSES—HAY-MAKING.

THE PROPER TIME FOR CUTTING GRASS; THE MODES OF CURING IT; HAULING IT TO THE BARN OR TO THE STACK.

In the article on the grasses, published in the March number of this report, the value of the hay crop of 1864 was stated at $365,707,074. A crop of so great value, subject to so many casualties during the curing process, and on which so large a portion of the farm stock is dependent, demands a notice of such matters as are connected with the making of the hay. So far as the hay crop is dependent on the grasses themselves, has been considered heretofore. At this time we will direct attention to the proper time for cutting the grasses, the modes of curing them, and the hauling to the barn or the stacks.

I. *The proper times for cutting the grasses.*—There is no work of the farm about which there is so much conflict of practice and opinion as the best time to cut many of the grasses. This is especially the case with timothy. In the west it is never cut a second time in the same season, but in the east the second mowing is very common. As the after-math of this grass grows slowly, where a second crop is intended, the first one is cut early, and stock become accustomed to the early-cut hay. These causes lead to that difference we have noticed, and every stage of maturity, from the bloom to the ripening of the seed, finds zealous advocates as being the proper time to cut this grass. As to clover the general opinion and practice is to cut it when about half the blossoms have turned brown; and red-top changes so slowly after the seed is formed, that the convenience of the farmer may be regarded in his selection of the time for mowing it.

The advocates of the early cutting of timothy assert that the stalk and leaves are most nutritious just before the blossom is unfolded; that all subsequent states of maturing but draw these nutritious elements from the stalk to the panicle; that when the seeds begin to form, the stalk commences to dry up, becoming woody; and when the seed has fully matured, the stalk is almost worthless for food. This reasoning is sound or unsound, and the inferences deduced are correct or erroneous, as the fact may or may not be, that when the seeds begin to form, the stalk begins to dry in consequence of the roots ceasing to act, and hence do not supply the plant with further nutrition whilst the seeds are ripening. Is this, then, a fact?

It is clearly so as to wheat, rye, barley and oats; it is not so as to Indian corn and sorghum. When the grains of the first are in the milk state, the stalk becomes yellow at the root, extending up to the head as the grain passes to the dough and hard conditions of ripeness. But with the latter, the root continues in active vigor for two months; the Indian corn roots dying in October, when the grain is perfectly filled, and the sorghum roots not dying until killed by freezing, but maturing the stalk in its saccharine juices long after the seeds are perfectly ripened. Whilst the straw of the smaller grains in the first class parts with most of its elements of nutrition to the grain, the fodder of the second class has a large amount of these elements. The following table of the analysis of

most of these by Dr. Salisbury will be interesting, and pertinent to the point under consideration:

Constituents.	Corn.	Corn-stalks.	Rye.	Rye straw.	Oats.	Oat straw.	Wheat.	Wheat straw.
Phosphoric acid	44.87	17.08	49.55	3.82	43.84	1.54	49.81	3.07
Sulphuric acid	12.77	1.19	0.98	0.83	10.45	6.46	0.24	5.82
Lime	1.44	7.98	4.93	9.06	5.95	3.15	2.81	6.70
Magnesia	16.22	6.64	10.35	2.41	9.95	1.09	13.03	3.82
Potash	32.48	9.62	20.08	12.36	26.18	3.15	23.72	13.44
Soda		16.30	11.67	0.31			9.05	0.16
Silica	1.44	26.97	0.43	64.50	2.67	76.16	1.27	65.38
Chlorine	0.18	3.42	.....	0.46	0.26	0.73	.....	1.09

What is most required by the matter under consideration is an analysis of the several grasses at every stage of their growth and maturity; for such an analysis is essential to the determination of that time, or stage of maturity, when the greatest amount of nutritious elements is in the leaves and stalks of each grass, and the extent of their exhaustion by the maturing of the grain. That time would undoubtedly be the proper time for cutting. Such analysis should be made in the country where the grasses are grown. As yet this department could not make it; but having recently obtained grounds for cultivation, it will soon be in a condition to make the needed analysis. Professor Way, of England, has analyzed the different grasses in a *green* and *dried* state, but these do not indicate their condition in the various stages of growth. Besides, the climate of Great Britain is too unlike our own to furnish plants having like elements in the same proportions. Thus in the following table it will be seen that the fattening properties of timothy are nearly double those of green or blue grass, a fact that a Kentuckian would be slow to believe:

Kinds of grass.	Water.	Flesh forming principles.	Fatty.	Heat-producing.	Woody fibre.	Ash.
Analyzed when green.						
Orchard-grass	70.00	4.06	94	13.30	10.11	1.59
Timothy	57.21	4.86	1.59	22.85	11.32	2.26
Green or blue grass	67.14	3.41	86	14.15	12.49	1.95
Red clover	81.01	4.27	69	8.45	3.76	1.82
Analyzed when dry.						
Orchard-grass	.....	13.53	3.14	44.32	33.70	5.31
Timothy	.....	11.36	3.55	53.35	26.46	5.28
Green or blue grass	.....	10.35	2.63	43.06	38.02	5.94
Red clover	.....	22.55	3.67	44.47	19.75	9.56

On this table Mr. Flint, in his work on the grasses, remarks that timothy, "as taken from the field *at the time of blossoming*, will be found to contain less water, a greater percentage of flesh and fat-forming principles, and less useless matter in the shape of woody fibre, than most of the other grasses." But still it does not show what would be the comparative amount of these elements at the various stages of the growth of each plant. Mr. Way gives, however, such an analysis of the orchard-grass, so far as to allow a comparison between its green state and when the seeds were ripe:

	Water.	Flesh-producing.	Fatty.	Heat-producing.	Woody fibre.	Ash.
Orchard-grass, when green	70.00	4.06	.94	13.30	10.11	1.59
Orchard-grass, seeds ripe	52.57	10.93	.74	12.61	20.54	2.61

This comparison shows a great superiority in the matured plant, the flesh, producing being more than double, and in the ash nearly double as much lime-potash, and chloride of sodium. The green state possesses a greater amount of phosphoric acid and chloride of potassium.

Although Mr. Flint leans to early cutting, probably being influenced by the prevailing practice of cutting two hay crops each season from the timothy, yet he remarks "that there are some exceptions to this rule in the natural grasses, as already seen in considering their nutritive qualities, and in the analyses at different periods of their growth. Thus in the case of the orchard-grass, Sinclair found the nutritive matter at the time the seed was ripe and at the time of flowering as seven to five, and the stems of timothy were found to contain more nutritive matter when the plant was ripe than at the time of flowering."

In the absence of such analyses in this country as is necessary to determine the relative condition of the several grasses at early, medium, and late cutting, is there any indication by their *growth* that may serve as a guide to the proper time of cutting?

The grasses are perennial, but are very different as to the times and manner of their growth. Thus clover and orchard grass begin to send up their after-math with a strong growth soon after their blossoming. These are early grasses. The timothy and red-top are slow to grow their second crop, and are late grasses. Shall we take the times when each of these commences this second growth as the proper time for cutting the first crop? Do the roots, then, in a measure cease to pass their sap to the grown stalks? If so, certainly the elements of nutrition are then at the maximum. Here science should aid practice by analysis. If the latter confirmed as a fact what is here suggested, then each farmer would at all times have before him a guide as to the time of cutting—that is, whenever the after-math or second crop began to shoot.

Although the outward growth may have ceased, yet there are internal changes going on that should not be disregarded. In all vegetation there is a like formation of the elements of nutrition, but differing as to the amounts of these in each plant, as is seen in the tables of analyses. The acids are first formed, then sugar, then starch. Each of these forms of the nutritious elements has its relative advantages. Thus acids counteract the effects of heat by preventing a heated, constipated state of the body. They promote the secretions. Hence a farmer of Worcester county, Massachusetts, writes to Mr. Flint, that "for working cattle and horses I cut about six days after the pollen has fallen, because it does not scour or loosen the animal so much as when cut in the blossom." Hay, then, made from the green, unripe grass, contains more acids, and by promoting the secretions is beneficial to milch cows. If the farmer has no roots to feed them, or corn-fodder, or wheat straw, which tend to prevent this heated, constipated state, a portion of his timothy hay should be made of unripe grass. But when the flesh-forming, fat-producing, and heat-creating elements are most desired, then the process of ripening should be allowed to go on until the plant has reached its maximum of sugar and starch. Mr. Flint correctly states this ripening process, when he says:

"From principles stated in another place it has been seen that the nutritive substances of grass are those which are, for the most part, soluble in water, such as sugar, gluten, and other compounds. Now, it is evident that if this is so, the grass should be cut at the time when it contains the largest amount of these principles. In its early stages of growth it contains a very large percentage of water. From its earliest growth the sugar and other soluble substances gradually increase till they reach their maximum percentage in the blossom, or when the seed is fully formed in the cell."

But in what plants is this maximum reached *in the blossom?* The English analyses show that as to orchard-grass and timothy it is reached when the seed

is *ripe*. In the sorghum, it is when to the matured seed of the panicle is added the matured saccharine juices of the stalk and leaves. While Mr. Flint correctly states the general process of ripening, he is mistaken in his application of its principle. He continues:

"From this period (the blossoming and formation of the seed) the saccharine matter constantly diminishes, and the woody fibre, perfectly insoluble in water, and innutritious, increases till after the seeds have matured, when the plant begins to decay. *Of course, if the plant is not cut in the flower, a great part of the nutriment of its stems and leaves is wasted.*"

How wasted? Is the nutriment wasted in wheat, rye, barley, and oats, by the transfer of the saccharine matter to the seed in the form of starch? Is it wasted in those grasses whose roots continue to supply saccharine matter as it is taken from the stalk and deposited in the seed as starch? Mr. Flint concedes that the orchard-grass and timothy are exceptions. Overlooking the great extent of the cases of continued action of the roots after the blossoming, he is led to give this counsel as to the time for cutting sorghum, which every sorghum-grower well knows to be erroneous. He says:

"When cut for sugar, the most favorable time is just after it has passed the blossom, or when the seed is 'in the milk;' and if raised for this purpose, the time of planting should be *later* than that of Indian corn."

The most ample experience, since Mr. Flint's work on the grasses was published, shows that sorghum cannot be planted too soon after the condition of the soil is fit for the germination of the seed, and that the cane cannot be too well matured for either sugar or molasses, and this maturity is evidenced by the stalk and leaves turning red, which is long after the seed is not only ripened but glazed and hard.

The completion of this internal ripening process should be sought for by the analysis of each grass, at every period of its growth, and the external appearances of each plant noted, so that the farmer can have a guide to direct him to the proper time of harvesting his grasses, according to the purpose for which his hay is designed.

Governed by the practice of farmers, and such light as science sheds on the question under consideration, the following rules are suggested:

1. *Clover.*—Mow it when about one-half the blossoms have turned brown.
2. *Orchard-grass.*—When the second crop begins to shoot.
3. *Timothy.*—When the seed is in the *dough* state.
4. *Timothy and the large clover.*—When about two-thirds of the clover heads have turned brown.
5. *Timothy and the small clover.*—According as the one or the other predominates, the cutting should be more near to the time laid down for the predominating grass.
6. *Red-top.*—When the seed is ripe.

II. *The modes of curing the grasses.*—The operation of changing the grasses into hay has but one object in view, the drying out of the water of the sap. To do this without producing chemical changes of the nutritious elements is the object. If done properly, the stem and leaves will be of a bright yellowish green, and soft and pliant to the grasp. If done improperly, they will be discolored, the clover leaf will be black and brittle, and the stem harsh and brittle, as if completely changed to woody fibre. What is the different chemical condition of grasses properly and improperly cured has not yet been determined by analysis, but it is hoped that it will be by this department. But when we see, as in the grape rot, how easily, even in the living plant, and in our climate of extreme and sudden heat, the saccharine matter is destroyed by the acetous and putrefactive fermentations, is it unreasonable to suppose that when the grass is suddenly deprived of life by cutting, and as suddenly subjected to the most in-

tense heats, a like change should take place in the sap of the grass? If this be so, then the grass should be cured in the shade as much as possible.

And this leads us to the notice of an error in the curing process, not universal, but too common. A farmer has a ten-acre field of clover, and the mower is sent into it; this mower, perhaps, owned by a neighbor who cuts for others. The whole field is mowed without stopping, and for two days the clover lies exposed to a scorching sun for want of sufficient labor to take proper care of it. When it is gathered into a stack or the barn it is black and almost worthless. Or if the meadow be timothy or of mixed grasses, it is cut down in a like manner, and heavy dews fall on it for perhaps two or more nights. The hay when made is discolored, it has lost that fragrance so pleasant in new-mown hay, and it is obvious that the wet of the dews, heated greatly by the sun, has changed the condition of the grass from what it was when first mown.

How, then, can the grasses best be cured so as to avoid this too great exposure to heat? In answer, it is best to consider the grasses separately, as their differences demand some changes in the mode of curing, though all require protection from too long exposure to great heat.

1. *Clover.*—Of all the grasses, this is the most liable to injury, from the fact, probably, that its amount of sap is greater, and the texture of the stem and leaves less compact. The sun, therefore, heats more rapidly a greater portion of sap than in other grasses, and, as a consequence, more rapidly changing the chemical condition of the clover as it is when mown.

Let us suppose that half the heads of the clover have turned brown; that the weather has been sufficiently wet to keep the ground moist; then the clover will be in full sap. In this condition it will not wilt as soon as if the weather had been dry; but if the clover is suffered to become dry before raking, the injury will be the greater, because of the greater amount of heated sap. In either case, the moment the top of the clover is *wilted* it should be raked into winrows; and if the force in the field is not sufficient to do this raking as fast as the mowing is done, the latter had better be stopped. When in the winrow the greater part of the grass is shielded from the sun and dews. The length of time it should remain in winrow depends on the condition of the grass, for if of heavy growth it will be longer drying than if standing thin on the ground. If the winrows are large they should be raked into a more open form, and closed gradually with the fork, turning and loosening the grass in so doing that the air may more freely circulate through it. If there is danger of rain, the winrow ought not to be risked over a night, but should be put into cocks the evening of the same day when the clover is mowed. If no such danger exists, and especially if the clover is heavy, the ground moist, and the weather not at its best drying condition, the winrow should be continued until the middle of the following day, when the clover should be put into cocks.

In doing this, the first matter to determine is the *size* of the cocks to be built. This will depend on several things. If the clover, from unfavorable weather, has had to be put into cocks before sufficiently dry, they should be smaller; and if they are to be hauled into the barn by wagon they need not be so large as if dragged to the stack by a rope or grape-vine. But whatever the size, they must be properly *built*, for their formation is a building process.

To be constructed properly, the grass that is rolled together by the horse-rake must be separated by the fork and laid in flat bunches on the cocks. If this is not done there is great danger of the rain penetrating, and the hay will settle so irregularly that it is difficult to prevent the top from leaning so much that a wind will blow it off. Experience will soon show how broad should be the base and how high the cock should be. It should be as high as possible; for if broad-based and low the rain will wet too much of the lower and outward parts and if too high great difficulty will be met in keeping it up. When built, it should

be raked with the fork and all loose portions pulled out and the rest straightened. If large cocks are put up the hay should be trampled down in them at least once.

If possible, no part of the clover that is mowed should remain over night spread out as left by the mower, because a dew injures it. But if not wilted much, this injury will be less. It is far better to apply the force of the field to secure that which is cut up to 3 o'clock in the afternoon, than to keep on with the cutting. If the ground is dry, and but little sap in the clover, it will be sufficiently wilted when cut as late as this hour to put into winrow the same evening, and if threatening rain it should be put into cocks. "*Secure well as you go*" is a motto that no farmer should forget, and no trusting to the weather should be given when there is the least apprehension. Low clouds on the horizon at sunset and a gentle wind after it, should be regarded as suspicious, and the work continued as long as the light will permit.

If the clover is heavy and cut with scythes and left in the swath it should be turned as soon as the top is wilted. If the winrow is made with the fork, and not by the horse-rake, in this turning the grass may be thrown nearer to the place where the winrow will be formed, and turned over in the throwing.

2. *Timothy.*—Much that has been said of the curing of clover is applicable to the making of timothy hay. Although timothy is not so easily injured, yet it, too, should be cured in the shade when well wilted. It does not dry as rapidly as clover, for its stems are more compact, and has solid joints or *nodes*, which clover has not, and hence there is less air admitted in the stem. If this grass is cut when the seeds are in the dough state the drying will be more rapid; and there being a more perfect formation of the saccharine matter, there is less danger of injury by too rapid drying than when the stalk is green and abounding in acids. What has been said of the timely use of the horse-rake in making clover hay must not be forgotten in making timothy hay, for a soft, pliant, bright-colored hay is as much to be desired in the latter as in the former. Rains and dews must be shunned. But timothy should remain longer in the winrow, as it cures less readily, and a heating and sweating takes place more slowly. If the weather is not favorable for rapid drying, the cocks may mould before these take place. When sufficiently cured, timothy may be put into larger cocks, for it is a longer grass, and settles more compactly and evenly. Some farmers build large shocks, requiring two horses to draw them to the stack, but this leads to too great pitching. No useful purpose can be accomplished by them except greater protection from the weather when they are to remain unstacked for a good while. But this delay in stacking often leads to an injury to the hay from mould, caused by the ascending dampness from the ground and rains wetting the lower part, thus increasing the effect of the damp soil.

3. *Red-top and mixed grasses.*—It is needless to speak of these in detail. The general directions already given are applicable to these grasses, and specific statements founded on the nature of the grass are useless, because the condition of the weather must always be more regarded than these. The chief point to be observed is the curing of all grasses in the shade as far as possible, a rule applicable to the straws, corn-fodder, tobacco, and, indeed, all other vegetable products intended to be used as foddering substances.

III. *Hauling to the barn or the stack and stacking.*—From what has been said, it will be seen that this should take place as soon as possible, for dews on the cocks, even if no rain falls, discolor the outside, and moisture from the soil moulds the inside. Better check up in the cutting for a sufficient time to haul in or stack the hay that is fit, than encounter useless risks.

If the field is near to the barn or stacking place, more particularly if the stacking is to be done in the field, the most expeditious and cheapest way to haul it is by a rope or grape-vine, and a single horse. The cocks can be hauled

very rapidly, and but one hand to each horse is necessary. It is not our purpose to dwell upon methods of hauling not in general use, such as loading on a wagon from the winrow. The adoption of this plan depends upon circumstances, but the methods in general use are those we purpose to notice at this time.

Clover hay is often hauled in on the wagon the same day it is cut. Where there are open sheds and rail floors, instead of close board floors, so that a circulation of air can pass through and around the hay, this plan may do well, if too great a bulk is not stowed away; but the heating will be greater than desirable, and should be avoided, if possible. A few persons, in putting green clover in the barn, add an alternate layer of straw or old hay. This facilitates the drying, but it involves such a degree of useless pitching that it is impracticable except on a very limited scale.

If the cocks are warm and sweating, then in putting them on the wagon they should be taken apart and scattered as much as possible on the wagon, so that the hay may cool and dry. If they are dry, then large forks-full should be raised on the wagon and loaded so as to preserve the flat and compact form in which the cock has settled. It can be hauled better, and packed more solidly in the mow, than when taken apart, and, as it often is, rolled up in gathering a fork-full from the cock.

If the hay is to be stacked and the cocks are hot and sweating, it is best to build at the same time two stacks near to each other, so that the hay may be drying off on one stack whilst it is being put on the other, both stacks being built by one person. In unfavorable weather it often happens that there are enough showers to keep the bottom edges of the cocks wet. If put into a stack in this condition there is great danger of moulding. To hasten the drying of this part, it is often necessary to raise up these bottom parts so that the air may reach them, and this is done by raising up the stack slightly, and loosening up these wet parts. So, too, sometimes the top parts will be wet. These should be turned over on the ground to dry before the cocks are hauled in; or if not much of them is wet, it may be turned up when hauled to the stack, and when dry put into the stack. These precautions are often necessary to be observed, else the hay becomes either moulded, or has lost its fine fragrance, for simple dampness when stacked is sufficient to deprive the hay of that fragrance. We are speaking of wet and dampness from rain, or moisture obtained from the soil, but not of that dampness, accompanied by heat, known as the sweating process. The internal heat drives it away, leaving a pliant and bright hay.

It is not the purpose of this article to give directions on the mode of building stacks, nor stacking houses. The latter should be provided with movable tops, so that they may be lowered or raised at pleasure, for with these, several stacks may be building at the same time, and thus the hay dried and aired in seasons when unfavorable weather gives little opportunity of getting the shocks in proper order. They protect the stacks from having their tops blown off—an evil that should be guarded against when built out on the open grounds, by binding the tops down with hay-ropes, or by weight-poles hanging across the top. This securing should never be neglected beyond a single night after the completion of the stack.

In putting the hay into stacks or in the barn, it should be salted. Farm stock need their food salted as much as man; and not to do this, but to give them salt every week or two, causes them to drink so much water in winter, when it is cold, that we have often seen them chilling for some time after drinking. And how often is the salting entirely neglected. And then, too, the salt by its cooling and preserving properties will often save hay from moulding. With these advantages, the neglect to salt the hay in the mow or in the stack is most unwise. About four quarts of salt to the ton of hay is the proper quantity.

THE DECREASE OF CATTLE AND COWS.

A not unimportant object of the publication of our statistical tables of the amount of the several crops and of the different kinds of farm stock is to direct attention to an increase that may lead to over-production, or to a decrease that threatens scarcity. These warnings should be heeded, and thus the evil averted at the earliest practicable moment.

The tables of farm stock in the March report, showing the decrease of cattle and cows, have called forth various communications, of which we place before our readers the following.

Mr. Hamilton, president of the Pennsylvania State Agricultural Society, thus writes to the Commissioner of Agriculture:

"I am under obligation to you for copies of the monthly issue from your department, and have distributed the copies sent to the vice-president and commissioners of this society. Pardon me whilst I state my views on an important matter closely connected with agricultural prosperity, briefly, but very clearly, alluded to and elucidated in the report before me. I have been for some time seriously concerned at the falling off and derangement of agricultural products, particularly in the important one of cattle. It cannot be overlooked by the most casual observer, that from the immense slaughter and waste consequent upon the supply of animal food for the army and navy, whilst importing and breeding are at a stand-still, the most strenuous efforts will be necessary, on the part of the farmer, to prevent an absolute scarcity, particularly in the product of beef-cattle, and that beef must soon be sold at rates that but few will be able to afford. The high prices at present offered by butchers have tempted farmers to part with their *largest and best formed cows*, which under different circumstances would have been retained for breeding, and the most healthy and vigorous heifer calves have been sold to them. From this cause most farms exhibit a poor, ungainly stock of cattle compared to what it formerly was. Ohio, Indiana, Kentucky, Illinois, Missouri, and West Virginia, on which we used to rely for supplies, present limited resources. Some of these, by derangements caused by war, have almost ceased to breed; others do not import owing to the condition of the currency; whilst others, it is stated to me, have nearly exhausted the splendid herds which formerly roamed their pastures.

"From my position as president of the Pennsylvania State Agricultural Society I deem it a duty to appeal to you, with the hope that you will urge farmers, through your excellent monthly reports, to use fresh, vigorous, and prompt efforts to preserve and increase the most profitable breeds of cattle within their reach, so that the scarcity of beef may be averted."

Mr. John J. Taylor, of Shelby county, Missouri, says:

"I see from your reports that horses and cattle are on the decrease. Should the practice of butchering dry cows, as it has been done in this county, become general over the west, you may expect a continued decrease in cattle; and as I have stood on the streets of our town in the fall season and seen drove after drove of cows driven away for beef, I thought a law ought to be passed to limit this trade."

Mr. E. F. Lucas, of Warren county, Indiana, writes that "the usual increase of cattle has fallen off, owing to so many of the best graded cows having been killed and packed into barrel beef the last two years."

Comments.—It was hardly to be supposed that whilst the country was engaged in a war the most extraordinary the world has ever witnessed, and where, by the concentration of vast armies, the contest was one of exhaustion of the rebel sources of warfare, the agriculture of the loyal States would be undiminished. Much of its vast labor was diverted to the camp, and what immigration may

have reached the country but added to the *consumption*, for Irishmen just immigrated are found in cities and on railroad lines, and not as farmers in the country, especially in the great places of agricultural production—the west and northwest; and Germans prefer social intercourse with each other in towns and cities to the isolated life of a western farm. Fortunately the country had heavy surplus of horses, cattle, and hogs in 1861, else would the demands of the war have been much more severely felt. These demands are now rapidly ceasing, and the usual heavy consumption of horses, mules, cattle, and hogs, taken as live stock from the west to the south for plantation consumption, will not be suddenly, but gradually, restored. Whilst the south is recuperating, the north and west can be restoring their farm stock to numbers nearly as great as in 1861.

The high prices for stock food—hay, oats, and corn—interfered much with stock production. So did the destructive freeze of September 30, 1863, and that of the 18th of September following, by which the corn crop was destroyed. With these high prices for food, and the certainty that before the young stock would be sufficiently grown for market the high price for stock would cease, it could not be expected that the farmer would forego present gain by feeding and not selling his stock food.

But with the war now at an end, and with scarcely any foreign demand for breadstuffs, a change will take place, and deficiencies in our farm stock will be filled up.

To supply the loss of cattle, the first step will be to increase the number of *cows*. This must be done in two ways: to stop their slaughter for beef, an evil and a wrong justly condemned by our Missouri correspondent, and to raise more of the heifer calves. For a time the dairy establishments of the western reserve and other localities should cease from their usual practice of turning a cow on grass to be fattened when her milk product ceases to be profitable. That must be restored by breeding, and not by the purchase of another and the slaughter of the one nearly dry.

In the March report we alluded to the fact that whilst our exports had so greatly fallen off in nearly all our agricultural products, that of butter had increased. It still continues to increase, for up to May 2 the export from January, 1865, to May 2, was 6,843,827 pounds, whilst for the same time in 1864 it was 5,170,402 pounds. The causes of this increase are interesting, for they indicate that this demand will be permanent, and hence our ability to meet it should be equal to it.

Ireland is the butter-supplying part of the United Kingdom. But with the continued high prices for meats, the Irish landlords changed their policy from having many tenants to few, and from the cultivation of roots and small grains to that of meadows and pastures. This policy, it was supposed, would result in increased production of meats. But now it is seen in Ireland, as it was in California last summer and in Oregon last winter, that stock production depends as much on the goodness and amount of their winter food as upon an increase of pasturage in summer. This policy of the Irish landlords caused a greatly diminished tenancy, resulting in a decreased supply of roots and other winter food for cattle.

Mr. Pringle, of the Irish Farmer's Gazette, thus refers to the decrease of cattle and cows:

"The number of cattle increased up to 1859, at which time there were 3,815,598 head in Ireland; the numbers then decreased until last year, when the total showed an increase, owing to a large number of calves having been reared from the demand which existed for young beasts, both for stocking Irish pastures and for exportation to Great Britain. Still, as compared with 1859, the total last year was 558,289 head short in point of number.

"Cattle rearing and dairy farming being leading characteristics of Irish agri-

culture, it would naturally be supposed that every effort would be made to keep up the number of milch cows. This supposition has not been realized, however, for we find that while there were 1,690,389 cows in Ireland in 1859, the numbers have so diminished that last year the total returned by the registrar-general under that head amount only to 1,346,217, being 344,172 cows less than in 1859. If we calculate that each cow would produce 200 pounds weight of butter in the year, it follows that the supply last year of this very essential article in the general dietary of the population was 68,834,400 pounds short of what it was in 1839—a very serious decrease so far as consumers are concerned, and very serious also as regards the farmers of Ireland, for it may be taken as representing a diminution of their receipts not much short of £3,441,720 ($17,408,600) for last year alone."

This diminished Irish supply of butter leads to the increased American demand, which the above exports indicate, for Great Britain is the chief consumer of the butter exported from here. The dairy policy of slaughtering the cows when their milk fails, instead of breeding them, does not add to their numbers, but greatly diminishes them. A continuance in such a policy has the wisdom of the one that killed the goose that laid the golden eggs. A free supply of butter to Great Britain on our part will tend to increase the export demand, but a diminished supply will force that nation to an increase of their domestic production and a decrease of its consumption. And hence, for their own and the public good, we remonstrate against sending to the shambles any fair milch cow until her age renders her unfit for dairy purposes.

The unwise slaughter of heifer calves has been correctly referred to by the president of the Pennsylvania State Agricultural Society as one of the practices that has led to the decrease of cows. The great demand for butter and its high price have led to this error; but we see now, very clearly, that it must be eradicated, for, if continued in, cows must soon reach prices that will tend to make butter-making less profitable. In this country—particularly in the middle and eastern States—the calves are often sold to the butchers when from a week to a month old. We are not certain but this evil should be corrected by legal enactments, for animal food of this age cannot be regarded as healthful. At any rate, if the calves were kept until two months old, thousands of heifer calves would escape the shambles, which are now slaughtered, because their beauty and prospective utility would successfully appeal to the sympathies of that part of the household with whom the cow and the heifer calf should be objects of attachment and not simply of gain. Truly, in our affections, should the cow belong rather to the household than the barn-yard.

But purposing soon to notice the statistics pertaining to dairies, and to speak of the lessons these statistics will impart, we leave the subject until then.

STATISTICS OF THE DEPARTMENT.

The following letter has been received by the Commissioner of Agriculture, and the remarks it has led to in reply will be found to follow it:

COMMERCIAL DEPARTMENT OF THE TIMES,
Chicago, Illinois, April 20, 1865.

DEAR SIR: I desire to keep a file of your reports, and regret to say that I have mislaid the report of 1864, and never received the reports of January and February, 1865, and my present object in writing is to solicit from you those copies, if you have them.

My attention was never called to the Department of Agriculture until I re-

ceived your very valuable report for 1864, and I was very favorably impressed with the value of the statistics presented. I do not know but that report was the first; if not, however, and you have full sets of the reports giving similar information, I should be happy to receive them, as it is only by comparing the statistics of several years, one with another, that valuable results are obtained.

Your reports will prove as valuable to commercial men as to agriculturists, especially if one or two features are amplified. A knowledge of the yield of breadstuffs during a number of consecutive years, and the quantities exported during each of these years, will enable business men to ascertain almost accurately the quantities required for home consumption. Then a little general information concerning the condition of crops in foreign countries will enable them to determine whether the demand upon this country will be light or heavy, and ascertaining from your reports the aggregate yield of the country, can approximate in their estimates to the amount of surplus grain from which we can supply this demand. This information will render business comparatively certain, and enable merchants to form some conception regarding future prices.

In this connexion, information concerning forage crops would prove of value, and especially tables showing the yield of grain in foreign countries during a term of years, compared with their imports. Another statement of great value in connexion with the others would show the countries to which we have exported breadstuffs during several years, showing in what countries light or heavy crops will affect prices here. Statements should be given every month, and in bushels, in order to be of the most value, as but little conception of the actual condition of commerce is derived from a table of values, one column of which is based upon gold, another upon currency at $1 50, another upon currency at $2 40; one representing the transactions of a period celebrated for its prosperity, and another of a period marked by wide-spread financial and commercial depression.

I hope this branch of the subject can receive that intelligent consideration which the information at your disposal enables you to give it, and if it can, I bespeak for the reports of the Agricultural Department an extended usefulness and influence.

Respectfully, yours,

GEORGE W. RUST,
Commercial Editor.

Hon. ISAAC NEWTON,
Commissioner of Agriculture, Washington, D. C.

REMARKS.

The above letter of Mr. Rust makes it proper to say something relative to the duty of this department as to the publication of its agricultural statistics, the plan it has adopted to collect them, and the difficulties in the way of obtaining such information of foreign agricultural production and trade as is necessary to that system of statistical tables referred to by Mr. Rust.

By the act creating the department the Commissioner is required "to collect agricultural statistics, and make special reports on particular subjects whenever he shall think the subject in his charge requires it." These statistics evidently had particular reference to the condition and amount of the crops and farm stock, for these constitute the basis of that agricultural, commercial, and manufacturing prosperity which has so wonderfully advanced the progress of this country. There has always been a struggle between the producer and buyer involving questions of the condition and amount of the crops, and reliable information of these would "render business comparatively certain, and enable merchants to form some conception regarding future prices."

In the discharge of this duty it was the first object of the Commissioner to adopt a plan for the collection of these statistics. *To be available for commercial operations the result must be made known before the products have left the hands of the farmer.* Hence the usual mode of taking agricultural statistics, through township assessors, involved too great delay, as well as an expense not contemplated by the act of Congress. It could be done only by the aid of correspondents reporting the condition of the crops in their respective localities. The returns to our first circulars showed that these correspondents needed experience, both in the mode of ascertaining the facts of their reports and in their judgments of those facts; that it was necessary to follow the crops, month by month, from their planting to their harvesting and threshing; noting the weather, injuries from noxious insects, and whatever else increased or diminished the quality and amount of the crops. Casual correspondents were of no avail, and hence, as soon as it could, the department organized its present corps of regular and assistant correspondents—one chief and, at present, about an average of four assistants to nearly every county. When these are well organized it will be advisable to increase their number. Their reports are highly satisfactory, and exhibit a knowledge of their duties that is as gratifying as it is useful to the country.

As these correspondents receive no other compensation than some seeds and the reports of this department, it is obvious that the impelling motive to the performance of their duties is the fact of the good their reports are accomplishing, which good could not be felt or seen if the information they communicated appeared in an *annual report only.*

Mr. Rust has truly remarked that these statistical statements "should be made each month, and in bushels, to be of the most value." This was soon apparent to the department, and hence the publication of the monthly reports, and the estimates of the amount of the crops in bushels, pounds, or tons, as now published in them; for it needed but little experience to show that correspondents cannot, with the least accuracy, state the bushels, pounds, or tons of the crops, but can, with sufficient accuracy, give the *tenths* increase or decrease over or under the last year's crops from the general opinion that exists in all counties relative thereto, aided by the individual opinion of intelligent and observing farmers of the increase or decrease of crops in their neighborhoods.

The statistical information embraced in the tables of our agricultural products does not aim at more than such an approximation to the fact as will serve as a safe guide to commercial operations. The department is well assured that it may be relied upon as such an approximation, for it has been tested in various ways. There need be no hesitation in believing that it is more to be relied on than the State censuses of the crops collected by township assessors, for they are under no penalties for neglect of duty; they have no appreciation of nor interest in these statistics, nor are the farmers constrained to give true answers. The former, therefore, omit to call on many; and the latter, from fear of taxation, and not being informed of the objects of the inquirers, refuse to give in either the whole or a part of their annual productions. In this way such returns are so incomplete as to mislead rather than direct.

To most persons statistics have little attraction, although important to all classes. The produce dealer studies them as a part of his business, but farmers, generally, can be induced to notice them only with matters more interesting and connected with the statistical tables; hence leading articles, relating to the tables, are published in the reports. In this way these reports have elicited an interest among the farmers beyond the expectation of the department, as evidenced by letters received and by the demand for the reports. But as the products of agriculture constitute the base of all other pursuits, those engaged in these pursuits also appreciate the reports.

Mr. Rust has referred to certain things which, if amplified and better sys-

tematized, would add to the value of these reports. In this we certainly concur with him. And here it may be proper to say that suggestions and criticisms from others, when emanating from a proper motive, will ever be welcomed by the Commissioner; but when dictated by a snarling, selfish spirit, will be passed by unregarded. It was not to be expected that errors could be avoided, or perfection at once attained, in the action of a department that never before existed, and had no precedent to serve as a guide, and which has to act upon an agriculture that, in its extent, in the variety of its products, and in the diversified condition of its parts, is unexampled.

A reference to some of the difficulties that lie in the way of systematized tables will apprise Mr. Rust of their existence. A homely illustration will show the *nature* of these difficulties. The frugal housewife, when she desires to unravel a stocking, cuts it off first and then seeks for an end. When she has found it she commences to unravel; but this end soon runs out; and not until after many ends have been found and run out is the unravelling fairly in progress. So as regards agricultural statistics. There are many *isolated* facts, but no *system* of facts, either as to the facts themselves, or the *form* in which reported, or the *time* of their reporting. For instance, it is desirable to have tables of the imports and exports. Through the Journal of Commerce, of New York, those of that port are given regularly and systematically. But not so those of Philadelphia, Baltimore, and Boston. It is almost impossible for the department to get a quarterly report of the statistics of immigration. From the port of New York they are sent regularly to the department, but not from these other ports. If a common form of reporting the imports and exports, such as used by the Journal of Commerce, was adhered to by all the commercial papers, so that, *at the same time*, all the imports and exports were given, it would be a pleasure to prepare monthly, quarterly, and annual tables of all. But as it now is, there is no uniformity in *time* or *manner*. Some papers report certain articles only; some report by the fiscal year, some by the calendar year, and others by the crop year.

Again, the receipts and exports of domestic produce in the trade of each city should be reported in a like manner—that is, uniform as to the articles, the time embraced in the report, and the time of publication.

Again, the running out in the search after facts for statistical tables is most felt in the want of a systematized census report. It is the basis of all statistical facts pertaining to our agriculture, but its facts are *isolated*, and hence too many gaps are met with when applying it to many things the Department desires to notice.

Mr. Rust correctly intimates that as prices are much influenced by foreign demand, the state of foreign markets and of foreign agricultural production should be given in the monthly reports. This is true, and the Department, through the consuls, is endeavoring to procure reliable statistics of these. A very general statement of foreign agricultural production and of its markets is given from time to time in them, but *tables* of foreign production cannot be, until a system of estimating them, somewhat like that of this Department, is adopted by European nations. Prussia has a plan somewhat similar, but of far less speedy action. That nation exports wheat largely to Great Britain, but its surplus is chiefly derived from Russia, from which no statistical tables come.

Of foreign statistics of agricultural production, those of Ireland are most perfect and most speedily given. Yet Mr. Pringle, of the Irish Farmers' Gazette, in a very able paper on the statistics of the United Kingdom, says, that "they are not published until March or April; that is three or four months at least after the averages have been taken, and when the crops to which they refer *have mostly all been consumed*, so that, unless as a statistical record, *the returns are of little immediate value*." Now if Mr. Rust desires a report of European production, simultaneously with our own, or a close approximation

thereto, he will see the impossibility of so doing. It is indeed much to be desired that this could be done, *so that all the conditions bearing on foreign and home markets could be presented as a unit.* After more fully and completely testing the plan of this Department, and maturing a system for a decennial census, (for these must go together) the Commissioner will make every effort to induce their acceptance by the nations of Europe.

Their effectiveness for present purposes and their greater economy commend them to all. In Ireland, small as it is, 4,000 constables are engaged *annually* in the taking of its census, at an annual cost of $35,000. The *monthly* statistical reports of our crops and stock, covering so great an agriculture as that of the loyal States, has not cost annually $6,000, and the printing done by the Public Printing Office, and the distribution of the circulars and reports by the postal service. How much a decennial census *ought* to cost cannot be judged of by what it may have cost heretofore.

That the plan of this Department will be accepted by European governments there is good reason to believe. Mr. Pringle, in the paper referred to, thus draws the attention of the English people to it:

"The subject of agricultural statistics has been taken up in a most spirited manner by the United States government, and the second report of the Commissioner of Agriculture—that for 1863—(the annual report,) is, altogether, a remarkable volume. We find in it ample details, not only of the general agricultural statistics of the United States, but elaborate reports, also, of different parts of that country, and treatises on a variety of subjects bearing on agricultural and horticultural practice. Those details have been collected by the Department of Agriculture, and the report of the Commissioner contains a mass of information showing the present state of agriculture in, as well as the capabilities of, the United States, which every intelligent man in this country ought to make himself acquainted with. It would swell out this paper to a most unreasonable extent were I even to attempt to give a condensed statement of the American statistics; at the same time the following particulars may not be uninteresting."

After quoting the statistics of the amount of the different crops reported, and the acreage, and the number of each kind of farm stock, he continues:

"A report on agricultural statistics should include full information regarding the meteorology of the kingdom. On this point the American report is very full. Climate exercises a great influence on the system of farming pursued in different districts; and, therefore, the rainfall, temperature, &c., of as many districts as possible ought to be given."

Mr. Pringle had not seen the monthly reports. They would have better enabled him to judge the plan here adopted, especially in its rapid workings, resulting in a speedy publication of the amount of the different crops, and the numbers of farm stock. It is this feature that gives them their chief commercial value.

A leading Austrian paper, devoted to national economy and statistics, thus speaks of the statistics of the monthly reports:

[Translation.]

"The government of the United States—deriving such an essential part of its national wealth from its agricultural products—has established an independent department of agriculture, which, among other duties, is charged with furnishing the most accurate statements in regard to production, and with collecting the commercial statistics of cereals. These reports are made up, not only with thoroughness, but also with the utmost care in the collection of the data upon which they are based. The reports are not merely confined to North America itself, but they have also the object of gathering information, as correct as possible, on the condition of the markets of foreign countries so far as they have any bearing upon the United States.

"We cannot but look upon this arrangement as a most useful and practical one, though naturally it cannot effected out without great outlay of money and labor. It would certainly be most desirable to see the means placed at the disposal of our ministry of commerce to carry out similar measures, especially in a country like Austria, the productive powers and condition of which are so very different in themselves, yet forming the foundation of an essential part of our national prosperity.

"We have no hesitation in pointing out the example set by the United States, which, under the very pressure of a terrible war, laboring under the most difficult financial condition, and already enjoying a flourishing state of agriculture, deemed a saving in this respect to be false economy. Nay, the Department of Agriculture at Washington goes even so far, almost under the very thunder of the enemy's guns, as to submit to its government the plan of establishing agricultural model farms on the plan of those in operation in Europe. We cannot refrain from expressing our full acknowledgment of the civic—we might say of the administrative—courage evinced by these propositions; and in view of the serious condition of our agriculture, we dare refer most emphatically to the example given by young America, which, while not hesitating to learn from us, is entitled to give us instruction by its example.

"We have no wish in this respect to anticipate or forestall the course to be pursued by public men; but it would seem to be very proper for them to support the efforts of the ministry energetically, indefatigably, and comprehensively. We intended merely to show the correctness of such a measure, and that in republican North America there is no such sentiment entertained as would question everything emanating from the government. May we succeed in proving, by a grand transatlantic example, what it would have been proper for us—having an older formation of government—to offer as a fixed fact worthy of imitation."

The "Austria" then goes on giving some extracts from the "monthly report" for September, 1863, and adds:

"It would have been easy for us to have given still other columns of data from these official statistics, treating on the condition of several of the United States, up to the end of September of this year, the reports having come to hand in the middle of November, though requiring at least three weeks to cross the Atlantic. We wish merely to add that the meteorological tables of the Smithsonian Institution, made up from all portions of the United States, and reaching to the end of September, are given, commencing on page thirty, including especially the quantity of rain falling every month in each State, accompanied with accurate data.

"In conclusion, we must give it as our firm conviction that it is only the intimate connexion of meteorology with the management of agriculture that can give the former its practical value and importance, and by which alone, perhaps, those researches can be adapted to the wants of agriculture. What use is there in all the meteorology of years gone by? Here, too, we meet with a desideratum essential to the organization and operation of the ministry of commerce. There remains yet very much to be done in Austria, and there are still many things causing every man versed in national economy to deprecate the prevailing sentiments of false economy."

The preceding extracts will serve to show that the plan of this department for the rapid collection and speedy publication of agricultural statistics is attracting European attention and approval. And what has been here said will also serve to show some of the difficulties the department encounters in its efforts to perfect a *system* of statistical tables of American and European agricultural production and consumption, for the guidance of the commercial transactions in the products of their agriculture.

INJURIOUS INSECTS.

THE POTATO BUG.—THE CHINCH BUG.—THE CUT-WORM.

I.—The potato bug.

The time is near when the potato bug will commence its ravages. The decrease of the potato crop by it is very great, not only in the vines it destroys, but in the lessened amount planted, because of these ravages. An experience of several years satisfies us that timely attention to these bugs can protect the crop.

We have tried many remedies, as quicklime and ashes sown on the plants, by driving the bugs with bushes from the vines, &c., but these availed little. The bug, although "shy," and easily alarmed, soon learns to distinguish between noise and destruction, and caustic lime does not incommode it much. But although it comes in countless thousands, yet it knows when destruction is at hand, and flies from it. The best mode of destroying it is the following:

Fill a basin about half full of boiling water, and as quickly and quietly as possible put it under the potato tops, holding it in the left hand, and with the right lightly tap the vines. The bugs fall down into the basin. But when the water cools some, which it quickly does, they are not scalded, and do not readily drown. To change the water frequently requires time and trouble, and hence, instead of boiling water, take cold, and pour into it enough turpentine to cover it about a sixth of an inch in depth. The moment a bug touches it instant death is certain. When the basin is as full as the water will allow, scatter the destroyed bugs over the vines from which they have been collected. The sight of these dead ones, and the offensive scent of the turpentine, will soon clear the patches of the numerous living ones that will still be left.

These remarks apply to the *yellow* striped bug, which is most numerous, and collects together in large swarms or companies. But the large striped *black* variety does not collect in such large numbers, and, hence, is less easily destroyed. It continues to live longer than the yellow one. More patient care is therefore necessary to overcome it. We have never tried sowing salt upon the vines, as recommended in the following letter for the destruction of the chinch bug:

II.—The chinch bug.

Platteville, Grant Co., Wisconsin,
March 2, 1865.

Sir: I addressed a communication to you, accompanied with some specimens of chinch-bugs, nearly a year since, asking information from you as to the means of preventing their ravages, as, in company with so many of my neighbors, I suffered very severely last summer. I wish to report what I think is a successful experiment against their ravages. In their larvæ state they are very active, striking in the ground during the rain, and when fire or smoke is passing over them, and reappearing afterwards. I have been long satisfied that nothing here known would kill them without destroying the crop and the productive character of the soil. I then supposed that as they lived on the *sap* of the plant, they might be reached through it. I had a ten-acre piece of splendid wheat last summer which I watched carefully on the first appearance of the grub. I sowed on one acre three bushels of quicklime. It affected them no more than so much flour would have done. On the same day, 14th of June, I sowed one bushel of *salt* on one acre, and in thirty hours afterwards they had all left that piece, moving southeast into a piece of oats, and northeast into the corn.

That one acre of wheat was all I got from the ten, and from it I threshed seventeen bushels. I feel pretty well satisfied now that had I sown 1½ or 1¾ bushels of rock salt to the acre by the 1st of June, or from ten days to two weeks sooner than I did, I should have saved my whole crop. They had been working in the ground probably two or three days before I saw them. They destroyed the corn last year pretty generally after the small grain, and the same remedy applied to it will, I think, produce the same good results.

The destruction of our crops is most serious in the northwest; it is beyond belief; the numbers of this bug in the fly state were incalculable; the air at times in the day was darkened with them. We are dreading their return next season.

Yours, respectfully,

GEORGE R. LAUGHTON.

J. NEWTON, Esq., *Commissioner.*

III.—THE CUT-WORM.

In cool, wet seasons especially the depredations of the cut-worm are often serious to the corn crop particularly. As the present season promises to be such an one, we here republish a remedy tried by the Commissioner of Agriculture when on his farm near Philadelphia.

The cut-worms were destroying his corn, and an examination disclosed that there were enough of them to render it useless to replant. Gathering several worms, he put them separately in small vessels and sprinkled various things over them, none of which disturbed them but salt, and this proved instantly fatal. Fearful of injuring the corn if much of it was applied around the plant, he took a bushel of finely ground salt and mixed it with four bushels of plaster. They were thoroughly mixed, by sifting them through a common sieve, and then applied around and over each hill of corn by the hand. The corn was then just shooting above the ground, but the leaf had not unfolded. A row was left without this application to test the experiment. The result was that not a hill was touched by the worms except this row, and it was entirely destroyed.

The efficacy of salt in these remedies is not in so filling the sap of the plants that it is fatal to the insects living upon it, as Mr. Laughton supposes. So great a change in the condition of the sap would be fatal to the plant in all probability. But it is the effect of the salt on the skin of the insects and worms, and to the distaste they would have for any melted portions of it on the outside of the plants they lived on. The mixing of the salt with plaster was for the purpose of diffusing it more completely, and as the plaster attracts and retains moisture, it would longer preserve the salt than any other substance. But where it cannot be had, others, as finely pulverized charcoal, could be used in its stead.

FARM STOCK:

THEIR NUMBERS, PRICES, AND VALUE FOR JANUARY, 1865.

As these reports, except to the regular correspondents, to agricultural societies, and to the press, pass into many hands that have not received the preceding report, we republish the interrogatories to the correspondents, and the tables founded thereon, of the average numbers in *tenths*, and prices of the leading farm stock, which appeared in the March report. We do this that the tables of the whole numbers, and the value of this stock, may the better be understood, especially by those in Europe who will receive this report through our consuls.

The interest now awakening abroad in the plan for taking the amount and value of crops and farm stock pursued by this Department, and the great benefit that would result to all by its adoption there, demand a larger circulation of this number in Europe than has been of former numbers.

It will be seen from *Table No.* 1 that the *prices* of the stock are desired for *different ages.* It was thought that correspondents could more certainly state the prices of different ages than to estimate the average price of all ages. As there were scarcely any data by which the proportion of the numbers in each of these ages could be determined, no State or national census having ever separated the ages, it was no easy task to determine this proportion. It differs in different States. A State that raises and sells a particular stock, but does not buy it, will have a larger proportion of younger animals than one that raises few and buys a good many, for those purchased are of the older ages.

It is important to determine the value of this stock, as much so as that of the crops, and from both, *deducting the value of the food given to the stock that is embraced in the value of crops,* to estimate the value of all products of agriculture. To approximate to the *actual* value is desirable; for in this way could be seen the influences on market values of supply and demand, and of the condition of the currency. In Ireland the prices given to the stock are arbitrary, having no reference to market values. Mr. Pringle says of it:

"The Irish registrar-general has been in the habit of including a table in his returns, showing the estimated value of live stock in each year. These estimates are calculated according to the rates assumed by the census commissioners of 1841, namely: for horses, $38 40 each; cattle, $31 40; sheep, $5 28; and pigs, $6. *This I consider a weak point in the Irish statistical returns.* It is all very well to retain those rates for the purpose of comparison, since they have been adopted; but some means should be taken to arrive at a closer estimate of the *real* value of the live stock, for the assumed rates are now much beneath an actual average. Thus the average prices of cattle and sheep at the last October fair at Ballinasloe were as follows:

"*Cattle.*—First class oxen and heifers, $98 40; second class oxen, $81 60; heifers, $74 40; third class oxen, $61 20; heifers, $52 80; fourth class oxen, $36 60; heifers, $36.

"*Sheep.*—First class wethers and ewes, $15 12; second class wethers, $12; ewes, $12 96; third class wethers, $8 88; ewes, $9 60; fourth class wethers and ewes, $7 20."

This mode is certainly a "weak point," as it totally disregards an approximation to the *real* values. The plan of this department is to take the prices in January at the market places of each county, and from these take a general average in the State, and by it calculate the value, by multiplying it into the total of each kind of live stock of the State. The prices in January, as a general thing, fairly represent the value of the year round to the farmer, for if spring sales are higher, they are not more so, if to the January sales the cost of keeping be added. In January, too, the heavy sales of early winter are closing, and usually show the averages of those sales. The superiority of this practice over the *fixed* rates adopted in the Irish estimates will be seen at a glance.

As just stated, it was no easy matter to fix a general estimate of the proportion of the number of each age embraced in the interrogatories to the correspondents, and after much consideration the following proportions were fixed on:

Horses and mules.—1 year old and under, *one-seventh* of the whole number; between 1 and 2 years old, *one-fourth* of the whole number; between 2 and 3 years old, *one-third* of the whole number; over 3 years old, the *remainder.*

Cattle and oxen.—1 year old and under, *one-sixth* of the whole number; between 1 and 2 years old, *two-sevenths* of the whole number; between 2 and 3 years old, *one-third* of the whole number; over 3 years old, the *remainder.*

Cows.—No distinction of ages.

Sheep.—Under 1 year old, *one-fourth* of the whole number; over 1 year old, *three-fourths* of the whole number.

Hogs.—Under 1 year old, *three-fourths* of the whole number; over 1 year old, *one-fourth* of the whole number.

Table No. 2 exhibits the numbers and value of the live stock as divided and valued by the foregoing proportions, estimated by the average prices of table No. 1.

Table No. 3 shows the *total value* of each kind of live stock, and the average price ascertained by dividing the whole number of each kind of stock into the total value of each.

Table No. 4 is the same table in effect as No. 3, but so arranged as to show the value of the live stock of each State separately.

Table No. 5 exhibits the total numbers for 1864 and 1865, the increase and decrease of each kind, the general average price of each kind, and the total value of all live stock in January, 1865.

Table No. 1,

Showing the amount, in tenths, of the stock of the loyal States in January, 1865, compared with the amount in January, 1864, and the prices of the same for the different ages.

STATES.	HORSES.					MULES.				
	Average number of horses compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same between 1 and 2 years old.	Average price per head of same between 2 and 3 years old.	Average price per head of same over 3 years old.	Average number of mules compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same between 1 and 2 years old.	Average price per head of same between 2 and 3 years old.	Average price per head of same over 3 years old.
Maine	9¼	$34 72	$54 50	$80 22	$112 25	.....	.....	.....	.....	.....
New Hampshire	9	28 89	48 30	69 00	101 70	.....	.....	.....	.....	.....
Vermont	9⅓	34 33	56 33	77 33	111 11	.....	.....	.....	.....	.....
Massachusetts	9 3/10	38 33	55 22	76 66	111 70	.....	.....	.....	.....	.....
Rhode Island	9⅔	33 33	58 00	88 33	111 67	.....	.....	.....	.....	.....
Connecticut	10	35 60	58 40	84 00	119 00	.....	.....	.....	.....	.....
New York	8 9/11	38 11	64 44	92 65	122 00	10 4/11	$44 11	$76 61	$111 77	$151 50
New Jersey	9½	49 58	80 83	115 41	142 29	10	48 54	78 73	115 64	152 77
Pennsylvania	9⅓	40 19	67 02	97 70	113 51	10⅓	47 22	81 00	125 35	158 37
Maryland	9	37 34	58 84	80 84	125 81	10	43 14	68 57	100 50	152 50
Delaware	8¼	35 00	54 00	77 00	120 50	9	.....	.....	.....	.....
Kentucky	7⅞	41 25	58 95	78 95	105 00	8	55 63	78 91	110 20	130 87
Ohio	8 5/6	33 78	53 96	78 00	107 57	9	47 38	76 00	109 11	141 51
Michigan	10½	36 96	58 75	88 27	121 75	11⅓	45 41	72 72	106 36	147 79
Indiana	9 3/10	36 12	57 78	81 60	113 13	9½	47 26	76 00	105 00	138 16
Illinois	9⅓	38 43	60 00	87 65	117 39	10	51 70	67 73	113 00	148 00
Missouri	8	38 50	57 74	85 76	107 00	7¾	52 73	72 00	112 00	145 36
Wisconsin	10½	36 14	54 77	84 44	115 86	11¼	53 42	79 00	112 25	148 73
Iowa	10⅔	41 28	61 65	90 93	121 87	10	53 47	79 06	112 65	153 00
Minnesota	12	41 47	66 52	89 94	120 00	11	53 62	76 87	117 50	158 00
Kansas	11⅙	33 00	53 61	85 00	115 83	11	51 93	77 93	114 11	161 75
West Virginia	8 4/10	37 00	57 00	79 00	104 54	8 7/10	42 00	63 00	90 00	123 00
Nebraska Ter'ry	13⅓	39 54	64 54	92 72	120 91	13 2/10	60 28	88 43	136 00	167 22

TABLE No. 1—Continued.

STATES.	CATTLE AND OXEN.					MILCH COWS.	
	Average number of cattle and oxen compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same between 1 and 2 years old.	Average price per head of same between 2 and 3 years old.	Average price per head of same over 3 years old.	Average number of milch cows compared with that of January, 1864.	Average price per head of cows at this time.
Maine	8 2/11	$12 11	$23 94	$37 27	$68 19	9	$43 70
New Hampshire	8	11 10	20 40	34 00	67 00	8 4/5	39 30
Vermont	8	9 78	21 44	39 33	70 00	9 3/8	43 11
Massachusetts	9	12 50	24 50	40 75	68 75	8	52 50
Rhode Island	10	12 33	22 67	38 33	63 33	10	46 67
Connecticut	9 1/9	10 00	20 40	38 00	68 00	10	40 60
New York	8 3/4	11 58	21 41	35 83	62 00	10	44 31
New Jersey	8 3/4	14 45	23 08	35 21	63 58	9 1/2	48 00
Pennsylvania	9	11 42	19 71	31 48	49 24	9 1/3	39 22
Maryland	8 8/10	9 92	16 54	26 61	42 30	9 3/10	38 00
Delaware	7 3/4	10 50	20 00	35 00	48 00	8 1/4	42 50
Kentucky	8 1/2	10 33	20 20	34 33	52 12	9	42 29
Ohio	8 3/5	9 44	17 41	28 87	45 71	8 5/6	35 13
Michigan	9	7 83	15 72	27 48	49 00	10	32 27
Indiana	8 1/3	7 89	15 10	25 14	38 68	9	32 07
Illinois	9 3/5	7 78	14 69	23 71	38 58	9 1/2	30 46
Missouri	7 7/8	6 22	12 36	21 00	35 70	9	20 61
Wisconsin	9	7 63	14 06	23 41	41 45	10 1/6	28 78
Iowa	10	7 91	14 72	25 17	41 82	10 2/5	26 68
Minnesota	10 4/10	8 94	14 70	21 79	40 19	11 1/2	26 35
Kansas	12 1/9	8 00	15 44	27 55	45 77	12 2/9	26 66
West Virginia	8 7/10	7 60	15 80	25 30	38 45	9	32 81
Nebraska Territory	12 1/2	9 81	17 46	28 50	48 20	13 1/4	30 63

TABLE No. 1—Continued.

STATES.	SHEEP.			HOGS.		
	Average number of sheep compared with that of January, 1864.	Average price per head of same under 1 year old.	Average price per head of same over 1 year old.	Average number of hogs compared with that of January, 1864.	Average price of same per head under 1 year old.	Average price of same per head over 1 year old.
Maine	11	$4 57	$5 89	8 2/10	$14 21	$23 40
New Hampshire	11 6/10	4 22	5 85	7 7/10	15 50	30 00
Vermont	11 1/4	4 44	6 50	8 1/9	15 00	23 33
Massachusetts	10 4/10	4 48	6 84	8	14 85	31 43
Rhode Island	10	5 00	6 83	8 1/3	14 00	26 66
Connecticut	10	4 00	6 70	7 4/5	14 00	27 50
New York	10 3/5	4 26	5 93	8 1/2	11 90	20 82
New Jersey	9	4 64	6 77	8 1/3	12 58	23 00
Pennsylvania	11	4 07	6 15	8 1/2	9 21	20 81
Maryland	11 2/3	4 95	7 71	8 8/13	7 50	17 66
Delaware	8 3/4	4 50	6 50	8	10 50	27 50
Kentucky	10 1/2	4 10	6 00	8 1/3	5 34	11 52
Ohio	12 1/3	3 96	6 00	7 3/3	6 94	16 24
Michigan	12 1/4	3 79	5 68	8 1/2	5 26	13 23
Indiana	12 7/10	3 53	5 11	7 6/10	5 44	12 03
Illinois	12 2/3	3 93	5 70	8 4/10	6 85	14 18
Missouri	10 3/4	2 51	4 19	7	3 40	8 61
Wisconsin	14	4 43	6 18	8 1/3	6 00	13 65
Iowa	14 1/3	4 19	6 00	9	5 68	12 00
Minnesota	15 1/4	3 98	5 64	9 1/2	6 23	15 00
Kansas	14	3 78	5 56	7 3/10	3 63	10 16
West Virginia	10 8/10	2 70	4 27	8	5 00	11 36
Nebraska Territory	18 1/3	4 37	6 68	9 1/2	5 18	12 20

TABLE NO. 2,

Showing the numbers, price, and value of the live stock in each State, for the different ages named in Table No. 1, in the month of January, 1865.

STATES.	HORSES UNDER ONE YEAR OLD.			HORSES BETWEEN ONE AND TWO YEARS OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	7,450	$34 72	$258,664	13,037	$54 50	$710,516
New Hampshire	4,915	28 89	118,882	8,601	48 30	415,428
Vermont	7,131	34 33	244,807	12,480	56 33	702,998
Massachusetts	6,930	38 33	265,627	12,127	55 22	669,653
Rhode Island	1,009	33 33	33,630	1,766	58 00	102,486
Connecticut	4,936	35 60	175,721	8,638	58 40	504,459
New York	58,395	38 11	2,225,433	102,191	64 44	6,585,188
New Jersey	11,245	49 58	557,527	19,679	80 83	1,590,653
Pennsylvania	54,612	40 19	2,194,856	95,572	67 02	6,405,235
Maryland	11,231	37 34	419,365	19,655	58 84	1,156,500
Delaware	2,016	35 00	70,560	3,528	54 00	190,512
Kentucky	29,876	41 25	1,232,385	52,284	58 95	3,082,142
Ohio	74,356	33 78	2,511,746	130,124	53 96	7,021,491
Michigan	23,252	36 96	859,394	40,942	58 75	2,405,342
Indiana	51,242	36 12	1,850,861	89,673	57 78	5,181,306
Illinois	78,645	38 43	3,022,327	137,628	60 00	8,257,680
Missouri	31,135	38 50	1,198,697	54,486	57 74	3,146,022
Wisconsin	22,010	36 14	795,441	38,517	54 77	2,109,576
Iowa	43,989	41 28	1,815,866	76,981	61 65	4,745,879
Minnesota	4,540	41 47	188,274	7,945	66 52	528,501
Kansas	3,976	33 00	131,208	6,957	53 61	372,965
Nebraska Terr'y	1,384	39 54	54,723	2,422	64 54	156,316
Total	534,275	.....	20,225,994	935,233	.....	56,040,848

TABLE No. 2—Continued.

STATES.	HORSES BETWEEN TWO AND THREE YEARS OLD.			HORSES OVER THREE YEARS OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	17,382	$80 22	$1,394,384	14,278	$112 25	$1,602,705
New Hampshire	11,468	69 00	791,292	9,420	101 70	958,014
Vermont	16,640	77 33	1,286,771	13,669	111 11	1,518,762
Massachusetts	16,169	76 66	1,239,515	13,283	111 70	1,483,711
Rhode Island	2,354	88 33	207,929	1,934	111 67	215,970
Connecticut	11,518	84 00	967,512	9,462	119 00	1,125,978
New York	136,254	92 65	12,623,933	111,923	122 00	13,654,606
New Jersey	26,238	115 41	3,028,127	21,553	142 20	3,066,776
Pennsylvania	127,429	97 70	12,449,923	104,675	113 51	11,881,659
Maryland	26,206	80 84	2,118,493	21,528	125 81	2,708,438
Delaware	4,704	77 00	362,208	3,864	120 50	465,612
Kentucky	69,712	78 95	5,513,762	57,264	105 00	6,012,720
Ohio	173,499	78 00	13,532,922	142,518	107 57	15,330 661
Michigan	54,589	88 27	4,818,571	44,985	121 75	5,476,923
Indiana	119,564	81 60	9,756,422	98,213	113 13	11,110,837
Illinois	183,504	87 65	16,084,126	150,736	117 39	17,694,899
Missouri	72,647	85 76	6,230,207	59,675	107 00	6,385,225
Wisconsin	51,355	84 44	4,336,416	42,185	115 86	4,887,554
Iowa	102,641	90 93	9,271,561	84,312	121 87	10,275,103
Minnesota	10,594	89 94	952,824	8,703	120 00	1,044,360
Kansas	9,276	85 00	788,460	7,621	115 83	882,740
Nebraska Terr'y	3,229	92 72	299,393	2,652	120 91	320,653
Total	1,246,972	.....	108,054,751	1,024,453	.....	118,103,906

TABLE No. 2—Continued.

STATES.	MULES UNDER ONE YEAR OLD.			MULES BETWEEN ONE AND TWO YEARS OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	18	.....	.....	31	.....	.....
New Hampshire	1	.....	.....	2	.....	.....
Vermont	5	.....	.....	9	.....	.....
Massachusetts	17	.....	.....	30	.....	.....
Rhode Island	2	.....	.....	3	.....	.....
Connecticut	13	.....	.....	22	.....	.....
New York	247	$44 11	$10,895	433	$76 61	$33,172
New Jersey	975	48 54	47,326	1,704	78 73	134,156
Pennsylvania	1,498	47 22	70,735	2,621	81 00	212,301
Maryland	1,371	43 14	59,145	2,350	63 57	161,139
Delaware	321	.....	.....	562	.....	.....
Kentucky	10,243	55 63	569,818	17,925	78 91	1,414,462
Ohio	1,077	47 38	51,028	1,885	76 00	143,260
Michigan	88	45 41	3,996	154	72 72	11,199
Indiana	2,791	47 26	131,803	4,884	76 00	371,184
Illinois	7,037	51 70	363,813	12,564	67 73	850,960
Missouri	7,092	52 73	373,961	12,411	72 00	893,592
Wisconsin	247	53 42	13,195	432	79 00	34,128
Iowa	1,744	53 47	93,252	3,051	79 06	241,212
Minnesota	94	53 62	5,040	165	76 87	12,683
Kansas	323	51 93	16,773	566	77 93	44,108
Nebraska Terr'y	161	60 28	9,705	282	88 43	24,937
Total	35,365	.....	1,820,485	62,086	.....	4,582,493

TABLE No 2—Continued.

STATES.	MULES BETWEEN TWO AND THREE YEARS OLD.			MULES OVER THREE YEARS OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	41	.....	.....	34	.....	.....
New Hampshire	3	.....	.....	4	.....	.....
Vermont	12	.....	.....	9	.....	.....
Massachusetts	39	.....	.....	33	.....	.....
Rhode Island	4	.....	.....	3	.....	.....
Connecticut	29	.....	.....	24	.....	.....
New York	577	$111 77	$64,491	475	$151 50	$71,962
New Jersey	2,272	115 64	262,734	1,865	152 77	284,916
Pennsylvania	3,495	125 35	438,008	2,872	158 37	454,839
Maryland	3,200	100 50	321,600	2,678	152 50	408,395
Delaware	750	.....	.....	617	.....	.....
Kentucky	23,900	110 20	2,633,780	19,634	130 87	2,569,501
Ohio	2,513	109 11	274,193	2,064	141 51	292,077
Michigan	206	106 36	21,910	170	147 79	25,124
Indiana	6,511	105 00	683,655	5,349	138 16	739,018
Illinois	16,419	113 00	1,855,347	13,237	148 00	1,959,076
Missouri	16,548	112 00	1,853,376	13,594	145 36	1,976,024
Wisconsin	576	112 25	64,656	472	148 73	70,201
Iowa	4,069	112 65	458,373	3,342	153 00	511,326
Minnesota	220	117 50	25,850	180	158 00	28,440
Kansas	755	114 11	86,153	620	161 75	100,285
Nebraska Terr'y	377	136 00	51,272	310	167 22	51,838
Total	82,516	.....	9,695,488	67,586	.....	9,543,022

TABLE No. 2—Continued.

STATES.	CATTLE ONE YEAR OLD AND UNDER.			CATTLE BETWEEN ONE AND TWO YEARS OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	28,803	$12 11	$348,804	49,378	$23 94	$1,182,109
New Hampshire	20,253	11 10	224,808	34,720	20 40	708,288
Vermont	25,349	9 78	247,913	43,456	21 44	931,696
Massachusetts	20,479	12 50	255,987	35,107	24 50	860,121
Rhode Island	3,425	12 33	41,230	5,872	22 67	123,118
Connecticut	22,199	10 00	221,990	38,056	20 40	776,340
New York	121,068	11 58	1,411,967	207,546	21 41	4,443,559
New Jersey	14,797	14 45	213,816	25,367	23 08	585,470
Pennsylvania	115,558	11 42	1,319,672	198,100	19 71	3,924,361
Maryland	21,411	9 92	212,397	36,705	16 54	607,100
Delaware	4,567	10 50	47,953	7,838	20 00	156,560
Kentucky	60,271	10 33	622,599	103,322	20 20	2,087,104
Ohio	124,829	9 44	1,178,386	213,994	17 41	2,377,435
Michigan	54,816	7 83	429,209	93,972	15 72	1,477,239
Indiana	91,093	7 89	718,724	156,158	15 10	2,357,985
Illinois	163,116	7 78	1,269,042	279,628	14 69	4,107,735
Missouri	78,502	6 22	488,282	134,574	12 36	1,663,334
Wisconsin	64,793	7 63	494,370	111,074	14 06	1,561,700
Iowa	93,556	7 91	739,828	160,382	14 72	2,360,823
Minnesota	21,196	8 94	189,492	36,336	14 70	534,139
Kansas	19,743	8 00	157,944	33,846	15 44	522,582
Nebraska Terr'y	8,934	9 81	88,542	15,316	17 46	267,417
Total	1,178,758	.....	10,922,955	2,020,737	.....	33,616,215

TABLE No. 2—Continued.

STATES.	CATTLE BETWEEN TWO AND THREE YEARS OLD.			CATTLE OVER THREE YEARS OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	57,607	$37 27	$2,147,012	37,035	$68 19	$2,525,416
New Hampshire	40,507	34 00	1,377,238	26,041	67 00	1,744,747
Vermont	30,698	39 33	1,207,350	52,592	70 00	3,677,940
Massachusetts	40,958	40 75	1,669,038	26,330	68 75	1,930,187
Rhode Island	6,851	38 33	262,598	4,405	63 33	278,968
Connecticut	44,398	38 00	1,687,124	28,542	68 00	1,940,856
New York	242,137	35 83	8,575,768	155,661	62 00	9,650,982
New Jersey	29,594	35 21	1,042,004	19,026	63 58	1,209,673
Pennsylvania	231,117	31 48	7,275,563	148,576	49 24	7,315,882
Maryland	42,823	26 61	1,139,520	27,530	42 30	1,164,519
Delaware	9,134	35 00	319,690	5,874	48 00	281,772
Kentucky	120,542	34 33	4,138,206	77,492	52 12	4,038,883
Ohio	249,659	28 87	7,207,655	160,497	45 71	7,336,317
Michigan	109,633	27 48	3,012,714	70,480	49 00	3,453,520
Indiana	182,186	25 14	4,580,156	117,121	38 68	4,530,240
Illinois	326,233	23 71	7,734,984	209,723	38 58	8,091,113
Missouri	157,002	21 00	3,297,042	100,928	35 70	3,603,129
Wisconsin	129,586	23 41	3,033,608	83,307	41 45	3,453,075
Iowa	187,112	25 17	4,709,609	120,288	41 82	5,030,443
Minnesota	42,392	21 79	923,721	27,251	40 19	1,095,217
Kansas	39,353	27 55	1,084,175	15,519	45 77	710,304
Nebraska Terr'y	17,868	28 50	509,238	11,488	48 20	553,721
Total	2,347,390	.....	66,934,013	1,525,706	.....	73,616,904

TABLE No. 2—Continued.

STATES.	COWS.		
	Number.	Average price.	Total value.
Maine	135,059	$43 70	$5,802,078
New Hampshire	77,000	39 30	3,026,100
Vermont	162,356	43 11	6,999,167
Massachusetts	134,121	52 50	7,041,352
Rhode Island	21,290	46 67	993,604
Connecticut	109,714	40 60	4,454,368
New York	1,220,200	44 31	54,067,062
New Jersey	135,693	48 00	6,513,264
Pennsylvania	655,397	39 22	25,704,470
Maryland	94,845	38 00	3,604,110
Delaware	19,215	42 50	816,637
Kentucky	172,346	42 29	7,288,512
Ohio	609,799	35 13	21,422,238
Michigan	220,825	32 27	7,126,022
Indiana	455,140	32 07	14,596,339
Illinois	551,327	30 46	16,793,420
Missouri	272,718	20 61	5,620,717
Wisconsin	270,749	28 78	7,792,156
Iowa	294,131	26 68	7,847,415
Minnesota	78,768	26 35	2,075,537
Kansas	59,998	26 66	1,599,546
Nebraska Territory	17,439	30 63	534,156
Total	5,768,130	.....	211,718,270

TABLE No. 2—Continued.

STATES.	SHEEP UNDER ONE YEAR OLD.			SHEEP OVER ONE YEAR OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	226,462	$4 57	$1,034,931	679,385	$5 89	$3,901,578
New Hampshire	163,928	4 22	691,776	491,786	5 85	2,876,948
Vermont	313,022	4 44	1,389,818	939,067	6 50	6,103,935
Massachusetts	50,489	4 48	226,191	151,468	6 84	1,036,041
Rhode Island	8,156	5 00	40,780	24,468	6 83	167,116
Connecticut	44,836	4 00	179,344	134,507	6 70	901,197
New York	1,144,077	4 26	4,873,768	3,432,233	5 93	20,353,142
New Jersey	43,814	4 64	203,297	131,442	6 77	889,862
Pennsylvania	717,876	4 07	2,921,755	2,153,627	6 15	13,244,806
Maryland	62,518	4 95	309,464	187,554	7 71	1,446,041
Delaware	4,375	4 50	19,687	13,125	6 50	85,312
Kentucky	203,350	4 10	833,735	610,050	6 00	3,660,300
Ohio	1,448,835	3 96	5,737,387	4,346,505	6 00	26,079,030
Michigan	755,016	3 79	2,861,511	2,265,050	5 68	12,865,484
Indiana	613,978	3 53	2,167,342	1,841,935	5 11	9,412,288
Illinois	515,528	3 93	2,026,025	1,546,584	5 70	8,815,529
Missouri	202,391	2 51	508,001	607,174	4 19	2,544,059
Wisconsin	242,481	4 43	1,074,191	727,444	6 18	4,495,604
Iowa	366,683	4 19	1,536,402	1,100,051	6 00	6,600,306
Minnesota	16,160	3 98	64,317	48,481	5 64	273,433
Kansas	15,121	3 78	37,157	45,365	5 56	252,229
Nebraska Terr'y	2,718	4 37	11,878	8,154	6 68	54,469
Total	7,161,814	.....	28,748,757	21,485,455	.....	126,058,709

TABLE No. 2—Continued.

STATES.	HOGS UNDER ONE YEAR OLD.			HOGS OVER ONE YEAR OLD.		
	Number.	Average price.	Total value.	Number.	Average price.	Total value.
Maine	28,666	$14 21	$407,344	9,555	$23 40	$223,587
New Hampshire	24,593	15 50	381,191	8,197	30 00	245,910
Vermont	24,334	15 00	365,010	8,111	28 33	229,785
Massachusetts	37,958	14 85	563,676	12,653	31 43	397,684
Rhode Island	9,070	14 00	126,980	3,024	26 66	80,620
Connecticut	39,267	14 00	549,738	13,089	27 50	359,947
New York	524,987	11 90	6,247,345	174,996	20 82	3,643,417
New Jersey	137,594	12 58	1,730,933	45,865	23 00	1,054,895
Pennsylvania	622,296	9 21	5,731,346	207,432	20 81	4,316,660
Maryland	246,695	7 50	1,850,212	82,232	17 66	1,452,217
Delaware	24,154	10 50	253,617	8,045	27 50	221,237
Kentucky	1,201,713	5 34	6,417,147	400,571	11 52	4,614,578
Ohio	1,334,382	6 94	9,260,611	444,794	16 24	7,223,454
Michigan	254,772	5 26	1,340,101	84,924	13 23	1,123,544
Indiana	1,519,106	5 44	8,263,937	506,368	12 03	6,091,607
Illinois	1,525,673	6 85	10,450,860	508,558	14 18	7,211,352
Missouri	741,643	3 40	2,521,586	247,214	8 61	2.128.512
Wisconsin	255,479	6 00	1,532,874	85,159	13 65	1.162.420
Iowa	1,067,675	5 68	6,064,394	355,892	12 00	4,270,704
Minnesota	81,762	6 23	509,377	27,254	15 00	408,810
Kansas	76,685	3 63	278,366	25,561	10 16	259,670
Nebraska Terr'y	24,667	5 18	127,755	8,222	12 20	100,308
Total	9,803,171	.....	64,975,400	3,267,716	.....	46,820,918

TABLE No. 3,

Showing the total number and total value of each kind of live stock, and the general average price thereof, for each State, for January, 1865.

STATES.	HORSES.			MULES.		
	Total number.	Average price.	Total value.	Total number.	Average price.	Total value.
Maine	52,147	$70 42	$3,966,269	124	.....	.....
New Hampshire	34,404	66 37	2,283,616	10	.....	.....
Vermont	49,920	75 18	3,753,338	35	.....	.....
Massachusetts	48,509	78 75	3,658,506	119	.....	.....
Rhode Island	7,063	79 28	560,015	12	.....	.....
Connecticut	34,554	80 56	2,773,670	88	.....	.....
New York	408,763	85 84	35,089,160	1,732	$104 22	$180,520
New Jersey	78,715	104 72	8,243,083	6,816	106 97	729,132
Pennsylvania	382,288	86 14	32,931,673	10,486	112 14	1,175,973
Maryland	78,620	81 43	6,402,796	9,599	99 10	951,279
Delaware	14,112	77 16	1,088,892	2,250	.....	.....
Kentucky	209,136	75 74	15,841,009	71,702	100 24	7,187,561
Ohio	520,497	73 76	38,396,820	7,539	100 88	760,558
Michigan	163,763	82 80	13,560,230	618	100 69	62,229
Indiana	358,692	77 77	27,899,426	19,535	98 62	1,925,660
Illinois	550,513	81 84	45,059,032	49,257	102 10	5,029,196
Missouri	217,943	76 90	16,960,151	49,645	102 66	5,096,953
Wisconsin	154,067	78 72	12,128,957	1,727	105 48	182,180
Iowa	307,923	84 78	26,108,409	12,206	106 84	1,304,163
Minnesota	31,782	85 39	2,713,959	659	109 27	72,013
Kansas	27,830	78 16	2,175,373	2,264	109 23	247,319
Nebraska Terr'y	9,687	85 79	831,085	1,130	121 90	137,752
Total	3,740,933	.....	302,425,499	247,553	.....	25,041,488
Average price	.....	80 84	.....	.....	102 08	.....

TABLE No. 3—Continued.

STATES.	CATTLE AND OXEN.			COWS.		
	Total number.	Average price.	Total value.	Total number.	Average price.	Total value.
Maine	172,823	$35 89	$6,203,341	135,059	$43 70	$5,802,078
New Hampshire	121,521	33 36	4,055,081	77,000	39 30	3,026,100
Vermont	152,095	39 87	6,064,899	162,356	43 11	6,999,167
Massachusetts	122,874	38 37	4,715,333	134,121	52 50	7,041,352
Rhode Island	20,553	34 34	705,914	21,290	46 67	993,604
Connecticut	133,195	34 73	4,626,310	109,714	40 60	4,454,368
New York	726,412	33 15	24,082,276	1,220,200	44 31	54,067,062
New Jersey	88,784	34 36	3,050,963	135,693	48 00	6,513,264
Pennsylvania	693,351	28 60	19,835,478	655,397	39 22	25,704,470
Maryland	128,469	24 31	3,123,536	94,845	38 00	3,604,110
Delaware	27,403	29 41	805,975	19,215	42 50	816,637
Kentucky	361,627	30 10	10,886,792	172,346	42 29	7,288,512
Ohio	748,979	24 16	18,099,793	609,799	35 13	21,422,238
Michigan	328,901	25 45	8,372,682	220,825	32 27	7,126,022
Indiana	546,558	22 29	12,187,105	445,140	32 07	14,596,339
Illinois	978,700	21 66	21,202,874	551,327	30 46	16,793,420
Missouri	471,006	19 21	9,051,787	272,718	20 61	5,620,717
Wisconsin	388,760	21 97	8,542,753	270,749	28 78	7,792,156
Iowa	561,338	22 87	12,840,703	294,131	26 68	7,847,415
Minnesota	127,175	21 66	2,742,569	78,768	26 35	2,075,537
Kansas	118,461	20 89	2,475,005	59,998	26 66	1,599,546
Nebraska Terr'y	53,606	26 46	1,418,918	17,439	30 63	534,156
Total	7,072,591	.....	185,090,087	5,768,130	.....	211,718,270
Average price	.....	26 17	.....	.....	36 70	.....

TABLE No. 3—Continued.

STATES.	SHEEP.			HOGS.		
	Total number.	Average price.	Total value.	Total number.	Average price.	Total value.
Maine	905,847	$5 44	$4,936,509	38,221	$16 50	$630,931
New Hampshire	655,714	5 44	3,568,724	32,790	19 12	627,101
Vermont	1,252,089	5 98	7,493,753	32,445	18 33	594,795
Massachusetts	201,957	6 20	1,262,232	50,611	18 99	961,360
Rhode Island	32,624	6 37	207,896	12,094	17 16	207,600
Connecticut	179,343	6 08	1,080,541	52,356	17 37	909,685
New York	4,576,310	5 51	25,226,910	699,983	14 13	9,890,762
New Jersey	175,256	6 23	1,093,159	183,459	15 18	2,785,828
Pennsylvania	2,871,503	5 62	16,166,561	829,728	12 11	10,048,006
Maryland	250,072	7 01	1,755,505	328,927	10 04	3,302,429
Delaware	17,500	5 99	104,999	32,199	14 74	474,854
Kentucky	813,400	5 52	4,494,035	1,602,284	6 88	11,031,725
Ohio	5,795,340	5 49	31,816,417	1,779,176	9 26	16,484,065
Michigan	3,020,066	5 20	15,726,995	339,696	7 25	2,463,645
Indiana	2,455,913	4 71	11,579,630	2,025,474	7 08	14,355,544
Illinois	2,062,112	5 25	10,841,554	2,034,231	8 68	17,662,212
Missouri	809,565	3 77	3,052,060	988,857	4 70	4,650,098
Wisconsin	969,925	5 74	5,569,795	340,638	7 91	2,695,294
Iowa	1,466,734	5 54	8,136,708	1,423,567	7 26	10,335,098
Minnesota	64,641	5 22	337,750	109,016	8 42	918,187
Kansas	60,486	4 78	289,386	102,246	5 26	538,036
Nebraska Terr'y	10,872	6 10	66,347	32,889	6 93	228,063
Total	28,647,269	.....	154,807,466	13,070,887	.....	111,796,318
Average price	.....	5 40	.....	.....	8 55	.....

Table No. 4,

Showing the total number and total value of each kind of live stock, and the average price thereof, for each State separately, as taken from the preceding general table.

Stock.	Number in January, 1865.	Average price.	Total value.	Number in January, 1865.	Average price.	Total value.
	Maine.			Connecticut.		
Horses	52,147	$70 42	$3,966,269	34,554	$80 56	$2,773,670
Mules	124			88		
Cattle and oxen	172,823	35 89	6,203,341	133,195	34 73	4,626,310
Cows	135,059	43 70	5,802,078	109,714	40 60	4,454,368
Sheep	905,847	5 44	4,936,509	179,343	6 08	1,080,541
Hogs	38,221	16 50	630,931	52,356	17 37	909,685
Total			21,539,128			13,844,574
	New Hampshire.			New York.		
Horses	34,404	66 37	$2,283,616	408,763	85 84	$35,089,160
Mules	10			1,732	104 22	180,520
Cattle and oxen	121,521	33 36	4,055,081	726,412	33 15	24,082,276
Cows	77,000	39 30	3,026,100	1,220,200	44 31	54,067,062
Sheep	655,714	5 44	3,568,724	4,576,310	5 51	25,226,910
Hogs	32,790	19 12	627,101	699,983	14 13	9,890,762
Total			13,560,612			148,536,690
	Vermont.			New Jersey.		
Horses	49,920	75 18	$3,753,338	78,715	104 72	$8,243,083
Mules	35			6,816	106 97	729,132
Cattle and oxen	152,095	39 87	6,064,899	88,784	34 36	3,050,963
Cows	162,356	43 11	6,999,167	135,693	48 00	6,513,264
Sheep	1,252,089	5 98	7,493,753	175,256	6 23	1,093,159
Hogs	32,445	18 33	594,795	183,459	15 18	2,785,828
Total			24,905,952			22,415,429
	Massachusetts.			Pennsylvania.		
Horses	48,509	78 75	$3,658,506	382,283	86 14	$32,931,673
Mules	119			10,486	112 14	1,175,973
Cattle and oxen	122,874	38 37	4,715,333	693,351	28 60	19,835,478
Cows	134,121	52 50	7,041,352	655,397	39 22	25,704,470
Sheep	201,957	6 20	1,262,232	2,871,503	5 62	16,166,561
Hogs	50,611	18 99	961,360	829,728	12 11	10,048,006
Total			17,638,783			105,862,161
	Rhode Island.			Maryland.		
Horses	7,063	79 28	$560,015	78,620	81 43	$6,402,796
Mules	12			9,599	99 10	951,279
Cattle and oxen	20,553	34 34	705,914	128,469	24 31	3,123,536
Cows	21,290	46 67	993,604	94,845	38 00	3,604,110
Sheep	32,624	6 37	207,896	250,072	7 01	1,755,505
Hogs	12,094	17 16	207,600	328,927	10 04	3,302,429
Total			2,675,029			19,139,655

Table showing the number and value of live stock and average price—Continued.

Stock.	Number in January, 1865.	Average price.	Total value.	Number in January, 1865.	Average price.	Total value.
	DELAWARE.			ILLINOIS.		
Horses	14,112	$77 16	$1,088,892	550,513	$81 84	$45,059,032
Mules	2,250	estimat'd	254,250	49,257	102 10	5,029,196
Cattle and oxen	27,403	29 41	805,975	978,700	21 66	21,202,874
Cows	19,215	42 50	816,637	551,327	30 46	16,793,420
Sheep	17,500	5 99	104,999	2,062,112	5 25	10,841,554
Hogs	32,199	14 74	474,854	2,034,231	8 68	17,662,212
Total			3,545,607			116,588,288
	KENTUCKY.			MISSOURI.		
Horses	209,136	75 74	$15,841,009	217,943	76 90	$16,960,151
Mules	71,702	100 24	7,187,561	49,645	102 66	5,096,953
Cattle and oxen	361,627	30 10	10,886,792	471,006	19 21	9,051,787
Cows	172,346	42 29	7,288,512	272,718	20 61	5,620,717
Sheep	813,400	5 52	4,494,035	809,565	3 77	3,052,060
Hogs	1,602,284	6 88	11,031,725	988,857	4 70	4,650,098
Total			56,729,634			44,431,766
	OHIO.			WISCONSIN.		
Horses	520,497	73 76	$38,396,820	154,067	78 72	$12,128,987
Mules	7,539	100 88	760,558	1,727	105 48	182,180
Cattle and oxen	748,979	24 16	18,099,793	388,760	21 97	8,542,753
Cows	609,799	35 13	21,422,238	270,749	28 78	7,792,156
Sheep	5,795,340	5 49	31,816,417	969,925	5 74	5,569,795
Hogs	1,779,176	9 26	16,484,065	340,638	7 91	2,695,294
Total			126,979,891			36,911,165
	MICHIGAN.			IOWA.		
Horses	163,768	82 80	$13,560,230	307,923	84 78	$26,108,409
Mules	618	100 69	62,229	12,206	106 84	1,304,163
Cattle and oxen	328,901	25 45	8,372,682	561,338	22 87	12,840,703
Cows	220,825	32 27	7,126,022	294,131	26 68	7,847,415
Sheep	3,029,066	5 20	15,726,995	1,466,734	5 54	8,136,708
Hogs	339,696	7 25	2,463,645	1,423,567	7 26	10,335,098
Total			47,311,803			66,572,496
	INDIANA.			MINNESOTA.		
Horses	358,692	77 77	$27,899,426	31,782	85 39	$2,713,959
Mules	19,535	98 62	1,925,660	659	109 27	72,013
Cattle and oxen	546,558	22 29	12,187,105	127,175	21 66	2,742,569
Cows	445,140	32 07	14,596,339	78,768	26 35	2,075,537
Sheep	2,455,913	4 71	11,579,630	64,641	5 22	337,750
Hogs	2,025,474	7 08	14,355,544	109,016	8 42	918,187
Total			82,543,704			8,860,015

Table showing the number and value of live stock and average price—Continued.

Stock.	Number in January, 1865.	Average price.	Total value.	Number in January, 1865.	Average price.	Total value.
	KANSAS.			NEBRASKA TERRITORY.		
Horses	27,830	$78 16	$2,175,373	9,687	$85 79	$831,085
Mules	2,264	109 23	247,313	1,130	121 90	137,752
Cattle and oxen	118,461	20 89	2,475,005	53,606	26 46	1,418,918
Cows	59,998	26 66	1,599,546	17,439	30 63	534,156
Sheep	60,486	4 78	289,386	10,872	6 10	66,347
Hogs	102,246	5 26	538,036	32,889	6 93	228,063
Total			7,324,659			3,216,312

TABLE No. 5,

Showing the total numbers of live stock for 1864 *and* 1865, *the increase and decrease thereof, the general average price of each kind, the value of each, and the total value.*

	1864.	1865.	Increase.	Decrease.
Horses	4,049,142	3,740,933		308,209
Mules	280,847	247,553		33,294
Cattle and oxen	7,965,439	7,072,591		892,848
Cows	6,066,748	5,768,130		298,618
Sheep	24,346,391	28,647,269	4,300,878	
Hogs	16,148,712	13,070,887		3,077,825
Total	58,857,279	58,547,363	4,300,878	4,610,794

Number, average price, and total value for January, 1865.

	Number.	Average price.	Total value.
Horses	3,740,933	$80 84	$302,425,499
Mules	247,553	102 08	25,041,488
Cattle and oxen	7,072,591	26 17	185,090,087
Cows	5,768,130	36 70	211,718,270
Sheep	28,647,269	5 40	154,807,466
Hogs	13,070,887	8 55	111,796,318
			990,879,128

These tables show the value of the *live stock* of the farm to be $990,879,128. In the monthly report for February the value of the *crops* was placed at $1,504,543,690. Together, they make $2,495,422,818; but no one in his senses will regard that as the value of the personal property of the farm embraced in these tables, although both are often thus put together. They should rather be totally separated by deducting the value of the live stock from the crops; for no farmer can believe that live stock will more than repay the cost of

their food at the prices given for it in January last. But various tables have to be made in order to determine the proper amount to be deducted from the above total value of both live stock and the crops, to show *an approximate estimate of the annual earnings of agriculture.*

We have no time to do this; but the tables and the deductions from them will be given in the June report.

WOOL AND COTTON.

It will be seen from our report on live stock that the increase of sheep between January, 1864, and January, 1865, has been 4,300,878, and that the estimated number in the latter period is 28,647,269. It will also be seen, from the returns to our May circular, that the condition of sheep this spring is very good. We think the average fleeces will be *four* pounds; if so, the wool clip of the coming shearing season will be about 114,589,076 pounds.

What effect the cessation of the war will have on the prices of wool, is a question now discussed by commercial papers, and one interesting to a large and highly important agricultural interest. Hence we call attention to it at this time.

In the January report of 1864, after stating the amount of cotton then grown, and the great difference between that amount and the cotton crop of 1859, it was shown that wool would be a profitable product to the farmer until the amount of cotton grown in 1859 would again be reached, and that if peace was conquered in the summer of 1864, there would be a rapid decline in prices of wool in 1865. Here were presented two ideas—that peace would cause this rapid fall, but, until the cotton production was equal to 1859, wool-raising would still be remunerative.

For the expression of this opinion the Commissioner and his clerks were criticised—from a source, however, entitled to no consideration. But the opinion is now referred to for the purpose of showing its correctness, as the following table of prices will show.

The Philadelphia Commercial List quotes the prices of wool as follows:

	March 18, 1865.	May 13, 1865.
Tub-washed	$1 08 to $1 15	80 to 85 cents.
Fleece	93 to 1 00	65 to 73 "
Fine	90 to 95	72 "
Unwashed	61½	47 to 50 "

Here, then, is the "rapid decline in price"—nearly 25 cents per pound; and if the peace had been conquered a year ago, leaving to the south a greater capacity to grow cotton immediately, and a greater amount on hand, this decline would have been still greater.

Great as is this decline, yet wool is still remunerative to the grower, and will be for some time yet, because, by the march of our armies through the heart of the cotton-growing region, its capacity to grow a crop, such as referred to in our article of January, 1864, is greatly lessened.

The United States Economist, of New York, (one of the best informed papers of that city in regard to questions relating to prices of dry goods and the raw material from which they are made,) in referring to the fall in the price of wool, says: "This depression has produced in the minds of many strange forebodings for the future; but, notwithstanding all the darkness and uncertainty which at the present hang over this branch of business, we believe in a bright and prosperous future." And this opinion it bases on the facts that the price of wool

was not influenced by the state of the currency to the extent of other articles, and that the high duties on woollen cloths will keep down that excessive importation of woollen goods which, more than the great amount of cotton, depressed the wool interest in past times.

And here we cannot refrain from a notice of an article entitled "The Wool-growing Interest," published in the Philadelphia Commercial List of April 22. It is so derogatory to the farmer that we ask that most respectable journal either to avoid agricultural topics, or to employ a writer that has some little knowledge, at least, of the class which, in this article, it so unjustly denounces. It truly states that in 1860, whilst the cotton crop was worth $250,000,000, the amount of wool raised was but 60,511,343 pounds, and at the same time we imported woollen and worsted goods worth $40,000,000, which required 84,000,000 pounds of wool to produce.

It was this very importation, and this enormous cotton crop, that paralyzed the wool interest, and it was not "in consequence of the prejudices and ignorance of our farmers, who rejected a certain source of profit to themselves because they were only used to old-fashioned and less remunerative operations," as the Commercial List charges. No agricultural or other interest embodies greater intelligence and energy than has the wool-growing interest since 1828; but when free trade and custom-house frauds had driven from our country its wool manufactories, it was not to be expected that the American wool-grower would find profit in his flocks. The Economist, therefore, properly regards the high tariff duties as a strong guarantee to the wool-grower that his future will be bright and prosperous.

Although this protection has been given to the wool-growers since our article in January, 1864, was written, yet still he must expect to feel the opposition that will arise from increased cotton production, as was therein stated. *What will that increase probably be?* In answer, we will consider—

1. *Foreign cotton production.*—The great efforts and vast expenditures made by foreign nations to supply the world with cotton during our civil strife may cause it to be supposed that these nations will continue their present production, and thus, very soon, the world will have its accustomed cotton supply. But in our article on "American cotton, wool, and tobacco," published in the report for last November and December, it was stated that the climatic superiority of our country for cotton production would drive back all this competition. The London Economist of April 15, 1865, takes a similar view. Expressing the opinion that peace is near, and that cotton cultivation will be resumed here, it says:

"Of course, if this anticipation be correct, those countries which have only been enabled to send cotton hither during the anomalous prices that have prevailed of late, *will cease to send it;* and those which have been induced to send us extraordinary quantities will fall back to their old moderate amounts. To descend to particulars: fair Surat, which last spring was selling at 44 cents, is now purchasable at 22 cents per pound; ordinary East India, which in former days used to sell for 6 and 8 cents per pound, and which last year reached 32 cents, may now be had for 12 cents.

"Now, if these prices are to obtain, or if it is expected that they will obtain, the following results will follow: First. China and Japan, which last year sent us 52,000,000 pounds, will cease to send us any at all. Second. Bengal, and, to a certain extent, Madras, which last year sent us, between them, 350,000 bales, will ship to China (as they used to do) instead of to England, and will at once stop any unusual growth into which our high prices may have tempted them. Third. The Turkish supply, which has only recently become at all important or reliable, will again become precarious. Fourth. Egypt and Brazil will have a *tendency* to fall back to their old moderate supply—say 200,000 bales, as in 1860, instead of 460,000, as in 1864—just in proportion as prices

tend back to their old level. Fifth. The western and northwestern provinces of India (which, like Egypt, have greatly increased the average breadth of land under cotton, and have suffered inconvenience from the diminished production of food which was consequent upon the change) will gradually fall back upon their old habits, and be more likely to send us three quarters of a million of bales than a million and a quarter, on which some persons calculated for 1865."

Every person at all conversant with the cotton production of the world will concur in these views.

2. *Home production of cotton.*—What is the present cotton supply in the south is a matter of conjecture, and the estimates range from 1,500,000 to 3,000,000 of bales. According to a letter from a Boston manufacturer to Mr. Bright, of England, based on the information of an English agent of a Boston cotton house, who travelled as a neutral through Texas and western Louisiana, down the Red river to New Orleans, and who obtained information from the interior of Alabama and Mississippi, the cotton supply is stated at 2,500,000 bales. Be the amount what it may, it will come into market slowly.

Of the ability of the south to speedily grow large crops but little need be said. The destruction of the railroads and of the plantations; the complete exhaustion of means to restore them, and the necessities to grow food; the disorganization of labor, and the losses of the working white population—all indicate that the cotton crop will slowly attain an approximation to what it was in 1860. Had the south submitted when Hood was defeated—his movement being the last that was left to it—its ability would have been far greater. As it now is, the wool-grower may rely in safety that neither a foreign nor a home production of cotton will render unprofitable a continued like increase of his flocks. That the prices of wool will gradually decline from the high point they reached is certain, but they will still be remunerative.

IMPORTS AND EXPORTS AT NEW YORK.

IMPORTS FROM JANUARY 1 TO MAY 12, IN THE FOLLOWING YEARS.

* 1863—$70,237,950; 1864—$93,448,769; 1865—$54,789,181.

EXPORTS, EXCEPT SPECIE.

* 1863—$70,067,797; 1864—$62,311,910; 1865—$67,421,483.

Exports of specie from New York.

1863—$17,867,475; 1864—$19,816,782; 1865—$6,693,849.

Exports of specie from San Francisco from January 1 to April 13, 1864, and 1865.

1863— ; 1864—$20,317,467; 1865—$13,949,316.

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* The imports are estimated at *gold* values—the exports at *currency* prices.

EXPORTS AND PRICES OF PRODUCE FROM NEW YORK.

Table of the exports from New York of the leading agricultural products from January 1 to May 16, 1865, compared with those during the same time in 1864, and their prices in New York and Chicago.

Articles.	January 1 to May 16, 1865.	January 1 to May 16, 1864.	Prices in New York May 16, 1865.	Prices in Chicago May 10, 1865.
Wheat flour.....bbls.	484,598	751,473	$5 90 to $9 25	$3 75 to $9 50
Rye flour.....do..	1,200	1,593	.....	4 80 to 5 00
Corn meal.....do..	54,134	49,232	6 00	.....
Wheat.....bush.	912,946	4,269,497	1 37 to 1 66	98 to 1 06½
Corn.....do..	163,502	116,618	90 to 1 08	56 to 62
Rye.....do..	141	405	85 to 90	56
Barley.....do..	.....	150	.....	76 to 80
Oats.....do..	26,778	15,812	50 to 52	29 to 32
Peas.....do..	17,959	77,524	2 00 to 2 10	1 00 to 1 50
Cotton.....bales.	16,824	16,078	*45 to 50	.....
Hay.....do..	11,681	12,306	†95 to 1 20	80 to 95
Hops.....do..	12,075	12,399	10 to 35	25 to 40
Leaf tobacco....hhds.	27,679	12,021	07 to 25	.....
Leaf tobacco....pkgs.	30,640	18,028	.....	.....
Manuf'd tobacco..lbs.	1,922,588	1,207,671	.....	65 to 1 50
Petroleum.....galls.	3,096,099	4,805,856	52	.....
Pork.....bbls.	52,317	69,738	21 50 to 24 00	22 00 to 26 50
Beef.....do..	15,762	16,714	10 00 to 19 00	10 00 to 18 00
Beef.....tierces.	28,310	38,023	.....	.....
Cut meats.....lbs.	22,126,276	77,029,661	14 to 18½	13 to 18
Butter.....do..	7,040,441	5,356,436	15 to 40	10 to 32
Cheese.....do..	9,911,870	10,139,811	13 to 21	18 to 24
Lard.....do..	13,968,219	23,102,338	15¼ to 18	18 to 18½
Tallow.....do..	10,238,907	17,022,507	10 to 10½	.....

*Per pound. †Per 100 pounds.

EXPORTS AND IMPORTS OF CANADA.

EXPORTS.

Statement of the value of goods, &c., enumerated in the reciprocity treaty, being the growth and produce of the United States, and exported into Canada during the years 1862 *and* 1863 *and first six months of* 1864.

Articles.	1862.	1863.	6 months of 1864.
Animals	$347,936	$520,835	$98,741
Ashes	24,477	17,549	15,996
Bark	4,113	6,670	335
Broom corn	32,299	34,987	18,482
Burr and grind stones	15,088	13,795	4,632
Butter	104,082	97,171	86,123
Cheese	174,456	294,327	76,883
Coal	437,391	548,846	86,031
Cotton wool	56,460	29,928	55,668
Dyestuffs	60,976	69,176	36,773
Eggs	1,259	4,654	1,022
Fish	158,415	168,570	94,109
Fish oil	109,630	112,285	64,567
Fish, products of	.....	168	155
Firewood	47,232	36,599	11,443
Fruit, dried	61,113	71,945	58,610
Fruit, undried	370,511	379,170	121,613
Flax, hemp, and tow, unmanufact'd	106,666	75,464	96,162
Flour	1,088,679	898,029	313,746
Furs, skins, and tails, undressed	119,896	61,896	171,177
Grain of all kinds	7,876,919	5,062,610	1,155,017
Gypsum	15,333	13,829	6,413
Hides, horns, and pelts	350,000	384,951	189,038
Lard	53,381	81,757	100,048
Manures	9,618	7,843	8,033
Meal	44,563	28,603	10,476
Meat of all kinds	1,040,269	1,238,923	1,040,301
Ores of metals	12,516	12,505	2,795
Pitch and tar	13,925	11,158	2,702
Plants and shrubs	93,665	93,539	50,182
Poultry	3,852	4,654	5,874
Rags	8,991	11,333	3,376
Rice	2,746	88	1,398
Seeds	80,643	87,545	102,512
Slate	1,819	1,914	1,045
Stone and marble, unwrought	43,267	57,076	18,255
Tallow	129,516	152,268	86,016
Timber and lumber	91,772	62,241	47,988
Tobacco, unmanufactured	842,364	1,327,810	489,228
Turpentine	.....	64	44
Vegetables	61,218	47,729	24,326
Wool	333,570	208,858	118,320
Total exports	14,430,626	12,339,367	4,875,630

IMPORTS.

Statement of the value of the principal articles of Canadian produce and manufacture imported during the year 1863 *and the first six months of* 1864 *into the United States from Canada.*

Articles.	1863.	Six months of 1864.
THE MINE.		
Copper	$190,150	$445
Copper ore	182	91,887
Iron ore	17,819	10,864
Pig and scrap iron	82,098	36,903
Stone	12,470	4,206
Mineral or earth oil	10,231	1,672
Total	312,950	145,977
THE FISHERIES.		
Fish: Dried and smoked	$1,334	----------
pickled	76,114	11,056
fresh	27,164	19,434
oil	1,846	25
Furs and skins of creatures in sea	5,735	13,834
Total	112,193	44,349
THE FOREST.		
Ashes: Pot	$189,942	67,283
pearl	31,871	10,507
Timber: Ash	2,800	582
birch	1,285	246
elm	910	486
maple	1,187	117
oak	124,801	79,434
white pine	252,740	88,022
red pine	8,013	6,897
tamarack	83,495	25,713
walnut	11,652	1,011
basswood, butternut, and hickory	10,975	3,427
standard staves	34,743	12,941
other staves	78,340	23,664
knees	20,885	13,816
scantling	23,785	10,802
deals	1,359	1,064
plank and b'ds	2,963,426	1,075,624
spars	1,072	390
masts	3,017	1,162
laths and lathwood	8,050	1,235
firewood	279,973	87,515
shingles	43,898	17,148
railroad ties	22,260	10,253
other woods	120,187	75,712
saw logs	76,437	48,846
Total	4,397,103	1,663,897

Articles.	1863.	Six months of 1864.
ANIMALS AND THEIR PRODUCE.		
Horses	$1,465,080	$503,687
Cattle	511,737	358,925
Swine	197,129	82,284
Sheep	198,651	48,326
Poultry	18,202	9,767
Bacon and hams	60,865	30,903
Beef	10,360	4,202
Beeswax	449	234
Bears' grease	340	----------
Bones	1,805	60
Butter	244,341	96,120
Cheese	954	80
Eggs	35,496	11,947
Feathers	180	13
Furs, dressed	2,554	110
Furs, undressed	51,049	40,896
Hides	110,635	75,490
Horns and hoofs	4,084	1,190
Honey	108	----------
Lard	12,261	4,624
Pork	55,346	134,814
Sheep pelts	185,302	62,563
Tallow	9,979	211
Tongues	----------	100
Venison	283	1,110
Wool	974,153	392,373
Total	4,151,343	1,860,029
AGRICULTURAL PRODUCTS.		
Balsam	$2,171	$3,132
Barley and rye	2,260,438	176,597
Barley, pot and pearl	70	9
Beans	38,029	22,821
Bran	73,429	39,010
Flax	11,973	7,814
Flax-seed	5,069	20,664
Flour	2,216,440	721,506
Fruit, green	7,055	351
Hay	598	2,203
Hops	4,621	6,440
Hemp	500	----------
Indian corn	39,807	2,948
Malt	500	----------
Maple sugar	36	329
Meal	58,773	39,498
Oats	2,097,688	1,301,791
Other seeds	73,336	22,044
Peas	279,538	154,256
Tobacco	7,421	5,102
Vegetables	12,456	20,411
Wheat	1,410,462	507,702
Total	8,600,410	3,054,628

Imports from Canada—Continued.

Articles.	1863.	Six months of 1864.	Articles.	1863.	Six months of 1864.
MANUFACTURES.			Musical instruments	$1,505	$370
Books	$1,979	$538	Rags	61,612	28,405
Biscuits	4		Soap	40	150
Carriages	20,572	9,437	Starch		549
Cottons	10,106	712	Straw	1,953	2,290
Furs	477	456	Sugar boxes	96,626	2,960
Glass	325	140	Tobacco	185,150	58,799
Ground plaster and lime	7,504	2,369	Wood	26,315	16,265
Hardware	44,556	8,166	Woollens	4,480	3,209
India-rubber	11,957	1,891	Liquors: Ale, beer, and cider	3,571	354
Indian bark-wood	50		whiskey	1,996	1,418
Leather	38,610	7,618	other spirits	1,184	9,701
Linen	2,566		vinegar	1	
Machinery	19,150	17,915	Total	542,289	172,812

RECAPITULATION.

	1863.	Six months of 1864.
Products of the mine	$312,950	$145,977
Products of the fisheries	112,193	44,349
Products of the forest	4,397,103	1,663,897
Animals and their produce	4,151,343	1,860,029
Agricultural products	8,600,410	3,054,628
Manufactures	542,289	172,812
Other articles	310,603	104,555
Coin and bullion	1,623,541	676,130
Total imports	20,050,432	7,722,397
Total exports	12,339,367	4,875,630
Excess of imports	7,711,065	2,846,767
Deduct coin and bullion	1,623,541	676,130
Balance against the United States	6,087,524	2,170,637

REMARKS ON THE ABOVE TABLES.

We publish in the above tables the details of the exports and imports to Canada from the United States under the provisions of the reciprocity treaty. The first table gives the *exports* for 1862, but the second one does not contain the *imports* for the same year, as the Canadian official publications, from which the tables are taken, do not give them. But the exports and imports of 1863 and six months of 1864 are given; and the details are stated in full, that every interest involved in this trade may see to what extent and in what way it is favorably or prejudicially affected.

As regards agriculture, it appears that of its products we exported to Canada in 1863 about $10,555,783, and imported $12,737,539, being a balance against our agriculture of $2,181,756. If there were any compensation for this loss in other parts of the trade, as in manufactures made from the raw material of our farming, the objection would be weakened; but the entire amount of manufactured articles exported to Canada is too insignificant to be regarded for any purpose. How far the Maine and other lumber trade is affected we do not know; but however commerce may be benefited by the reciprocity treaty, it is obvious enough that a new treaty or regulation is necessary to the protection of agriculture and manufactures.

The following table of the imports of *agricultural produce* into the United States from Canada, and into Canada from the United States under this treaty, we find in the recently published agricultural report from the Census Bureau. If correctly given, it will serve to show how grossly unjust was this treaty to the agricultural interests of the country, and how essential it is that these interests should be better understood by our public men. The table is as follows:

Years.	Value of imports into the United States from Canada.	Value of imports into Canada from the United States.
1855	$11,801,435	$4,972,475
1856	11,864,836	3,809,112
1857	7,100,413	5,272,151
1858	5,740,305	3,385,517
1859	6,278,351	4,671,882
1860	10,013,799	4,603,114
1861	9,580,165	5,172,588
Total	62,379,304	31,886,839
	31,886,839	
	30,492,465	

Showing a balance against the agriculture of the United States exceeding thirty millions of dollars. Truly, was it an imperative duty of the government to put an end to a treaty so unreciprocal, and so grossly unjust to our farmers.

STATE OF THE ENGLISH AND EUROPEAN CROPS FOR 1865.

We take from the Mark Lane Express, one of the leading agricultural journals of London, the following notices of the condition of the English and European crops. They show a present prospect not equal to our own, but regarded as good, so that if the harvests at all correspond with present indications, the abundance will be great. But great changes may yet take place, both here and abroad. The Express of April 17 says:

"With another week's continuance of fine weather beyond the calculations of any of the prophets, the effect upon vegetation since April opened upon us has been immense, as well as nearly instantaneous. Spring, so long in coming, appears to have been distanced by summer, and all nature seems to have clapped her hands. The fears of the alarmists have partially subsided. Holders of light lands, who had fared the worst, had no doubt reason for being loud in their complaints; but the drill may fill up the gaps in time for a crop. As respects legitimate wheat soils—we mean the clays and heavy loams—the prospects are now reported to be as good as usual, and even the fens are very promising.

"The like benefits have generally extended to all parts of Europe, and the period of apprehension for the present seems passing away. But what of prices amidst this change? We can only say the late slight advance has been lost; but with our scale of imports so reduced as of late, and stocks going quietly off, and the present enormous consumption, there is nothing to encourage importers to increase the present ratio."

The same journal of April 24 thus comments on the weather and crops:

"Although rather colder, the weather continuing fine through the past week, vegetation has everywhere made corresponding progress. Some complaints of the young wheat are indeed still made, but the general reports are favorable. The backward sowings of the Lent wheat have sprung up, or are springing vigorously, and all that is wanted is continuance of favorable weather. Eng-

land, it appears, does not stand alone in this respect; as France, Belgium, Holland, and Germany have participated in the geniality of the month, and, with no future disaster or untoward changes, Europe and the world generally has the prospect that the necessary supplies will not be withheld. Had our range of prices been high, a considerable fall might have been expected; but as they have for some time been below remuneration, we can note no change, *except it be a somewhat upward tendency*, though there have been some few exceptions. We have sometimes had shipments of wheat from Australia, and the beauty and weight of the samples have placed the colonists before the growers at home, but low prices have changed the relative position of England and its colonial possessions, as some wheat has this week been purchased on Australian account, and this has served to give *increased firmness* to the holders of foreign, *the quality selected being red American.*"

The Express of May 1 has the following notice:

"Another hot and dry week in the season for showers, though it has forced on vegetation wherever it had a good hold on the soil, has caused some fears for the young spring wheat, not only in this country but also in Europe, where the same sort of weather has prevailed. The well-established plants of wheat, however, in strong land have progressed wonderfully; but the holders of light soils still make some complaints, and certainly showers are wanted for the spring wheat drilled into the gaps, as well as for everything that has just been sown. In ordinary times the brightness and power of the sun at so early a period would have brought down prices, but the past week shows either great resolution on the part of farmers, or a general conviction that we have touched our lowest point, as quotations throughout the country have established an advance of one shilling per quarter, (24 cents per 480 pounds.)"

Similar weather, rather hot and dry for the season, prevailed in most of Europe, and the tendency in its markets was either to an advance or had actually advanced. "Very little fine old wheat was left at Dantzic, and high prices had to be paid in consequence, but the best new was as yet plenty."

The Express of May 8 has the following notice of the weather and the markets:

"During the past week some fruitful showers fell, which everywhere did much good, followed by a considerable quantity on Sunday, which was much wanted for the spring wheat. The earth having been warmed by the hot sun of April, almost instantaneous effects are produced. We still hear of complaints, however, about the wheat from light-land farmers, and there is a general holding back of samples as the consequence of unsatisfactory prices; and as America can no longer be relied on as a source of supply, the Baltic markets are already anticipating an upward movement in this country. Happily there is no apprehension of war as respects the United States, and the sincere condolence of this country and Europe will go to assure our brethren that the fatherland harbors no ill-will to those who long achieved their independence. Indeed, the present President seems well to understand his mission of peace and good will. Wheat prices have further advanced one shilling per quarter, (24 cents per 480 lbs.,) and there seems more and more disposition on the part of owners not to throw away their chances of some remuneration on remaining stocks. In Paris the movement has also been upwards; and the country, with the exception of the southern departments, answers to the capital by a slight advance. Belgium and Holland note little difference in prices; but at Hamburgh they have still been advancing, and Danzig has been quite excited, rates having gone up four shillings per quarter, (96 cents per 480 lbs.,) though some reaction has since been announced by telegram. The interior of Germany has continued much the same.

AGRICULTURAL IMPORTS INTO GREAT BRITAIN.

Imports into Great Britain of farm products for three months, from January 1, 1865, *to the* 1st *of April following, compared with the imports for the same months of* 1864.

Textile materials.	1864.	1865.
Cotton ..... pounds..	126,780,416	160,526,688
Flax ..... do....	37,688,560	15,300,544
Wool from Europe ..... do....	3,273,334	4,099,471
South Africa ..... do....	2,958,464	4,260,012
British India ..... do....	1,178,016	1,812,560
Australia ..... do....	6,654,378	11,086,398
other countries ..... do....	3,233,579	4,589,020
Total ..... do....	17,297,771	25,847,461
Woollen rags torn up, to be used as wool ..... do....	4,884,992	3,839,584
BREADSTUFFS.		
Wheat from Russia ..... bushels, (sixty pounds)..	1,085,108	1,999,418
Prussia ..... do.....	2,143,443	259,819
Denmark ..... do.....	698,329	179,626
Mecklenburg ..... do.....	220,108	46,346
Hanse Towns ..... do.....	356,395	32,892
France ..... do.....	740,854	279,074
Turkey, &c ..... do.....	260,607	276,944
Egypt ..... do.....	501,276	.....
United States ..... do.....	4,199,177	232,262
Canada, &c ..... do.....	20,231	4,282
other countries ..... do.....	259,466	259,549
Total wheat ..... do.....	10,486,663	3,570,213
Indian corn ..... bushels, (fifty-six pounds)..	855,428	2,347,884
Flour from Hanse Towns ..... barrels, (196 pounds)..	61,094	38,098
France ..... do.....	577,766	307,554
United States ..... do.....	371,126	40,823
Canada, &c ..... do.....	2,327	5,691
other countries ..... do.....	13,651	4,687
Total flour ..... do.....	1,025,964	396,853
PROVISIONS.		
Bacon and hams ..... pounds..	27,422,640	13,635,440
Beef, salt ..... do....	11,499,488	5,970,384
Pork, salt ..... do....	4,008,032	2,986,928
Butter ..... do....	21,589,456	23,414,272
Cheese ..... do....	12,128,592	14,244,608
Lard ..... do....	1,944,208	2,128,448
MISCELLANEOUS.		
Hops ..... pounds..	4,841,312	2,364,208
Tobacco, stemmed ..... do....	614,059	660,181
unstemmed ..... do....	7,419,653	9,685,443
manufactured, and snuff ..... do....	1,270,893	567,829
Petroleum ..... tons..	4,092	2,198

Remarks.—The great decrease in the exports of breadstuffs and provisions from the United States to Great Britain will not fail to be noticed by our farmers. The falling off in wheat and flour is extraordinary. The only increase worthy of notice is in Indian corn, butter, and cheese, and unstemmed tobacco. In bacon, beef, pork, and petroleum, the export is not more than half what it was in the like period of three months of 1864. There is an increased import of wheat from Russia, which is, perhaps, of inferior quality to be fed to live stock.

THE CONDITION OF THE CROPS, &c.

THE following tables exhibit the *general condition* of the winter and spring sown crops, the average *amount* of fattening cattle, and the *condition* of these, and of sheep and hogs, the *condition* of clover fields and pastures, and the *general state* of the weather during the months of March and April.

These tables are compiled from the returns of our correspondents made by them on the 1st day of May to the circulars addressed to them by the department. The questions in the circulars are given in the tables, and the answers come from nearly all the counties, for the correspondence of the department extends to nearly all of them at this time.

On the back of the circulars are printed such directions and remarks as may be deemed proper. 10 is the representative of the *appearance, amount, condition,* &c., and the comparison is with a general average, or last year, or any other period that may be indicated in the question. One-tenth above it is written 11, and one-tenth below it 9; so that the amount of grain winter killed, when returned 9, means that only one-tenth is destroyed in this manner. From the tables it will be seen how little injury the winter crops have sustained—indeed, never less than at this time.

The *appearance*, too, of the winter and spring sown crops is all that could be desired, and the abundant pastures will increase the supplies of beef and butter.

The *amount* of maple sugar and molasses is not equal to that of last year, for the spring opened early and quickly, and, as is too often the case, many farmers lost the first run of the sugar-water, which was the best of the season.

The *condition* of the live stock inquired about is very good, for the uniform temperature of the winter has been very favorable. Hogs are very scarce, however, as will be seen by reference to the tables of live stock. The excellent *condition* of sheep assures the country that a full clip of wool will be sheared.

The *numbers of fattening cattle* are much less than last year, about two-tenths, or 20 per cent. less. But as the consumption of beef will be decreased by the return of the armies to the homes of the soldiers, this decrease will not be sufficient to *increase*, although it may prevent as *great a fall* in price, as in articles of food more abundant.

But the present promise of abundant crops is gratifying, and with plenty of food, and the labor in the armies restored to the farm, the country can joyfully commence its restoration to that high state of prosperity which everywhere abounded when accursed leaders forced the rebellion upon the people.

The present spring has been regarded as unusually wet. How far it may interfere with the planting of corn, sorghum, cotton, the sowing of flax, &c., will be seen in the next report. By comparing the number of weeks returned as wet last spring, in the months of March and April, with the whole number of weeks reported, with the same months of this year, we find that during March, 1864, there were about one-fifth of the weeks "*wet.*" and about one-

third this year. The number for April, compared in the same way, shows that this month for 1864 and 1865 were equally wet, being "*wet*" nearly four weeks in every ten, or nearly two-fifths of the time too wet for farm operations.

The comparison is as follows:

	Favorable.	Cold.	Dry.	Wet.	Whole No. of weeks.	Per cent. of wet weeks.
March, 1864	541	439	164	263	1407	18¾
March, 1865	872	429	129	660	2090	31
April, 1864	398	358	191	653	1600	40¾
April, 1865	831	253	192	804	2080	38¾

Table showing the condition of the winter grain and certain live stock on the 1st day of May, 1865.

STATES.	WINTER WHEAT.		WINTER RYE.		WINTER BARLEY.		CATTLE.		SHEEP	HOGS.
	Average *appearance* of winter wheat.	Average *amount* winter-killed.	Average *appearance* of winter rye.	Average *amount* winter-killed.	Average *appearance* of winter barley.	Average *amount* winter-killed.	Average *number* of fattening cattle, compared with 1864.	Average *condition* of stock cattle in April.	Average *condition* of sheep in April.	Average *condition* of stock hogs in April.
Maine	10 4/5	9	11	8	10	10	7 3/4	9 5/7	10	10
New Hampshire	13 1/3	8	13	9	.....	.....	7 5/9	10 3/5	11	10
Vermont	12 1/4	8 1/2	12	9	13 1/2	.....	8 2/7	10 3/10	11	10
Massachusetts	11	9	11 5/12	9 1/8	10	9 1/2	8 4/11	10	10 5/11	9 7/12
Rhode Island	.....	.....	10 1/3	9	.....	.....	8 1/3	10 3/8	11	10
Connecticut	10 1/3	9	10 2/5	9	9	11	8 2/5	9 3/5	10 2/5	10
New York	11 1/2	8 3/8	11	8	10 5/8	7 3/8	7 1/5	10	10 3/7	9 6/7
New Jersey	11	8 4/11	10 3/4	9 2/9	9 3/8	9 3/8	8 1/6	10	10 3/8	10
Pennsylvania	12	8	11 1/3	8	9 1/2	8	8 3/5	10 1/4	10 1/2	10 1/4
Maryland	11 1/2	9	10 3/5	9 1/3	10	10	7 3/4	9 3/3	10	10
Delaware	10	8	10	.....	.....	.....	5	9	12	10
Kentucky	11 2/5	8	10 1/2	8 4/5	11	8 3/5	7 1/4	11	10 3/7	11
Ohio	12 1/2	7 3/8	12 1/2	7 3/8	11	7 1/2	8 1/3	11	11 1/7	11
Michigan	12	8 3/8	11 1/4	8 1/2	10 5/7	8 3/5	8	10	10 3/8	10
Indiana	11 1/6	8 1/2	10 5/7	9 1/5	10 2/5	9	8 2/5	11	11 1/9	11 1/9
Illinois	10 1/3	8	10 1/2	9	9 3/8	9	8 1/5	11	11	11
Missouri	9 4/5	8 1/4	10 1/6	9	10 1/3	9	7 3/8	9 4/11	10 1/4	9 1/2
Wisconsin	10 2/5	8 1/2	11	9	10 1/3	9	8	9 1/2	11 1/2	10
Iowa	10 3/7	8 1/11	10 2/5	8 4/5	10 3/5	9	9 3/5	10 1/2	10 1/5	10 2/5
Minnesota	9	8 5/6	9 1/2	8 4/7	7 1/2	7 1/2	9 3/3	10 3/5	10 3/8	10 1/4
Kansas	11	8	11	8 1/5	10	8 3/8	9 1/5	10 1/3	10 1/3	10
Nebraska Territory	11 1/4	7 1/3	12	9	.....	.....	11	11 1/5	10 3/3	11 1/3
West Virginia	12 2/7	7 3/4	11 1/2	8	8 2/5	8 3/8	7	11 3/8	11 1/8	11 3/8

Table showing the amount and appearance of the spring grains, &c., for March and April, 1865.

STATES.	SPRING WHEAT.		SPRING BARLEY.		OATS.		MAPLE SUGAR AND MOLASSES.		CLOVER.	
	Average *amount* of spring wheat sown, compared with 1864.	Average *appearance* of same.	Average *amount* of spring barley sown, compared with 1864.	Average *appearance* of same.	Average *amount* of oats sown, compared with 1864.	Average *appearance* of same.	Average *amount* of maple sugar made this spring, compared with 1864.	Average *amount* of maple molasses made this spring, compared with 1864.	Average *amount* of acres sown in clover this spring, compared with 1864.	Average *condition* of old clover fields.
Maine	10¾	10	9¾	10⅜	9⅝	10⅜	9	8⅜	9	12
New Hampshire	10	10⅜	10	10	10	10	7⅞	7⅞	9⅝	11⅛
Vermont	10⅞	10⅜	10⅖	10⅖	10⅖	11¼	8⅞	8⅞	9⅛	12
Massachusetts	10	10⅝	10 3/10	10	11	10⅞	8⅜	8	10⅘	11
Rhode Island	10	10	10	10	10⅛	10⅛	.....	.....	9½	10
Connecticut	9¼	10⅜	10	10	10⅖	10½	9	9	10	10
New York	9⅜	10⅜	10½	10⅖	10⅝	10⅛	8⅝	8½	9¼	11
New Jersey	9⅛	10⅛	10	10	10⅛	10⅜	9	9	10	9½
Pennsylvania	10⅞	10½	10⅛	10¼	10¾	10½	7⅕	7¼	9⅛	11
Maryland	10	10	10	10	10¼	10	.....	.....	9⅙	9
Delaware	.....	.....	.....	.....	9	10	.....	.....	8	11
Kentucky	10	10	9⅐	10⅞	10½	10⅘	9	8⅜	11	11
Ohio	10½	10⅛	10⅙	10	10⅘	10⅐	8	7⅐	9⅐	11⅕
Michigan	10⅕	10⅞	10⅞	10⅛	11	10½	10	10⅖	10	10⅗
Indiana	10	9⅜	9	10⅗	10½	10⅙	9¼	9	8¼	10⅓
Illinois	9¼	10⅜	9½	10½	10⅐	10⅛	11⅜	10⅜	9½	10½
Missouri	9	10⅕	11	9½	10⅑	10	10⅖	10	9⅛	10
Wisconsin	9	10⅜	9⅓	10⅜	11¼	10⅜	8⅓	8½	10½	10¼
Iowa	9⅓	10⅑	9⅘	9¾	10¼	10½	8⅝	8⅜	10⅛	10⅘
Minnesota	9½	9½	10⅕	9¼	12½	9⅓	12	11¾	9	8½
Kansas	10 6/10	11	10½	10½	11	11 1/18	10½	10½	8¾	.....
Nebraska Territory	12¼	12⅝	9½	11⅜	11	12⅐	.....	.....	.....	.....
West Virginia	10	10	10	10⅜	11⅜	10⅘	8	8	9⅘	10¾

Table showing the appearance of the spring pastures and general condition of the weather for March and April, 1865.

STATES.	SPRING PASTURES.		WEATHER.							
			Weeks.							
			March.				April.			
	Average *appearance* of pastures in April.	Average *amount* of clover frozen out.	Fav.	Cold.	Wet.	Dry.	Fav.	Cold.	Wet.	Dry.
Maine	12	7¾	39	0	13	0	30	8	11	3
New Hampshire	12	9	13	6	8	1	19	4	2	5
Vermont	12	8⅓	22	1	4	0	22	1	5	0
Massachusetts	12	8½	33	5	7	3	24	4	7	9
Rhode Island	11⅔	9	8	0	0	0	7	0	1	0
Connecticut	11	8	15	0	1	0	16	1	0	3
New York	11⅚	8	70	29	51	14	105	17	33	13
New Jersey	12⅔	9	31	6	9	2	31	3	10	4
Pennsylvania	11½	8	78	24	63	5	94	6	56	16
Maryland	11	8⅔	28	4	15	1	22	0	23	3
Delaware	12	9	9	3	0	1	3	0	1	0
Kentucky	12	9¼	18	7	54	1	23	1	54	3
Ohio	12⅓	8	76	27	70	14	89	16	60	27
Michigan	10⅘	8⅘	74	31	25	10	56	30	29	25
Indiana	12	9	60	37	65	21	63	9	104	8
Illinois	11	9	75	35	83	20	47	23	123	21
Missouri	11½	9	31	33	48	9	26	15	87	4
Wisconsin	10	8⅔	57	48	15	4	37	24	32	7
Iowa	9⅝	9⅒	67	63	56	9	46	42	99	9
Minnesota	9 1/14	9	19	41	6	6	22	23	21	6
Kansas	10½	10⅓	18	13	29	4	20	10	27	10
Nebraska Territory	11⅒	.....	11	9	7	1	9	12	6	1
West Virginia	13	8¾	20	7	21	3	20	4	13	15
			872	429	660	129	831	253	804	192

METEOROLOGY.

FROM THE SMITHSONIAN INSTITUTION.

MARCH, 1865.

Table showing the highest and lowest range of the thermometer, (with dates prefixed,) the mean temperature, and amount of rain, (in inches and tenths,) for March, 1865, at the following places, as given by the observers named. The daily observations were made at 7 o'clock a. m. and 2 and 9 p. m.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
MAINE.								
				°		°	°	*In.*
Steuben	Washington	J. D. Parker	20	50	7	4	33.3	4.97
Lee	Penobscot	Edwin Pitman	16	50	6	0	31.7	6.00
West Waterville	Kennebec	B. F. Wilbur	29	51	7	4	33.5	4.50
Gardiner	....do	Rev. F. Gardiner	20	52	7	10	34.8	5.39
Lisbon	Androscoggin	Asa P. Moore	.....	.....	6,7	8	.....	5.08
Cornish	York	Silas West	29	53	6,12	10	33.1	5.18
Cornishville	....do	G. W. Guptill	29	50	12	11	33.1	4.52
NEW HAMPSHIRE.								
Exeter	Rockingham	Rev. E. Nason	16	63	6	15	37.8	.....
Stratford	Coos	Branch Brown	16	55	6	2	31.5	4.69
Shelburne	....do	F. Odell	16	57	7	— 2	34.3	.....
Barnstead	Belknap	Chas. H. Pitman	20,30	56	12,13	15	36.2	4.78
Claremont	Sullivan	S. O. Mead	21	59	6	10	35.5	.....
Do	....do	Arthur Chase	29	59	6	10	36.0	3.35
VERMONT.								
Lunenburg	Essex	H. A. Cutting	21,22	78	12	0	49.9	5.98
Craftsbury	Orleans	Jas. A. Paddock	30	53	12	0	30.2	3.13
Middlebury	Addison	H. A. Sheldon	21	66	12	8	36.1	3.95
MASSACHUSETTS.								
Sandwich	Barnstable	N. Barrows, M. D.	21	63	12	18	40.4	4.95
Topsfield	Essex	A. M. Merriam	16	60	12	23	40.9	4.20
Georgetown	....do	Henry M. Nelson	20	61	12	15	36.9	.....
Newbury	....do	Jno. H. Caldwell	16	62	12	14	37.8	.....
New Bedford	Bristol	Sam'l Rodman	21	61	12	19	39.8	4.70
State Lunatic Hosp'l	Worcester	F. H. Rice	21	67	6,12	18	39.2	4.72
Mendon	....do	J. G. Metcalf, M. D.	21	68	6	16	39.2	.....
Baldwinsville	....do	Rev. E. Dewhurst	21	60	12	10	32.5	3.62
Amherst	Hampshire	Prof. E. S. Snell	20	57	6	13	37.1	5.98
Springfield	Hampden	J. Weatherhead	21	72	6	14	38.0	5.07
Westfield	....do	Rev. E. Davis	21	63	6	14	38.4	6.29
Richmond	Berkshire	Wm. Bacon	21	72	12	10	37.0	7.79
Williams College	....do	Prof. A. Hopkins	21	69	12	11	36.7	5.29

Table showing the range of the thermometer, &c., for March—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
CONNECTICUT.								
				°		°	°	*In.*
Pomfret	Windham	Rev. D. Hunt	21	69	6, 12	16	35.4	5.25
Columbia	Tolland	Wm. H. Yeomans	21	76	6, 12	20	41.5	.....
Middletown	Middlesex	Prof. Jno. Johnston	21	76	6	17	41.0	4.75
Colebrook	Litchfield	Charlotte Rockwell	21	72	6	9	36.3	.....
NEW YORK.								
Moriches	Suffolk	Miss N. Smith	8	68	11	22	44.6	7.31
South Hartford	Washington	G. M. Ingalsbe	16,20,22	60	6	12	39.0	6.08
Fort Ann	....do	P. A. McMore	17	67	2	10	43.9	4.17
Fishkill Landing	Dutchess	Wm. H. Denning	21	71	6	14	40.4	4.56
Garrison's	Putnam	Thos. B. Arden	21	69	6	15	40.3	6.40
Deaf and Dumb Inst.	New York	Prof. O. W. Morris	21	71	11	22	45.6	8.32
Columbia College	....do	Prof. Chas. A. Joy	21	67	11	21	41.6	3.81
St. Xavier's College	....do	Rev. Jno. M. Aubier	21	71	11	20	43.3	.....
Flatbush	Kings	Eli T. Mack	21	64	11	19	42.4	3.97
Newburg	Orange	James H. Gardiner	21	73	10	20	43.1	1.90
Gouverneur	St. Lawrence	C. H. Russell	21	74	12	— 5	34.0	2.84
Clinton	Oneida	Dr. H. M. Paine	16	72	12	9	40.1	2.32
South Trenton	....do	Storrs Barrows	16	54	12	8	32.5	6.35
Cazenovia	Madison	Prof. Wm. Soule	21	82	12	4	37.7	2.96
Oneida	....do	Dr. S. Spooner	21	71	12	10	35.5	2.82
Sherburne	Chenango	Rev. J. R. Haswell	21	75	12	6	36.6	.....
Theresa	Jefferson	S. O. Gregory	21	70	12	— 6	33.9	3.66
Oswego	Oswego	Wm. S. Malcolm	21	72	12	6	36.0	4.86
Palermo	....do	E. B. Bartlett	21	68	12	4	33.5	4.70
Baldwinsville	Onondaga	John Bowman	16	63	12	5	35.4	.....
Skaneateles	....do	W. M. Beauchamp	21	68	12	4	35.5	.....
Auburn	Cayuga	John B. Dill	21	76	12	8	36.6	.....
Nichols	Tioga	Robert Howell	21	76	10,11,12	10	39.9	.....
Palmyra	Wayne	Stephen Hyde	21	75	12	14	40.7	.....
Geneva	Ontario	Rev. Dr. W. D. Wilson	21	73	12	10	37.6	2.05
Rochester	Monroe	Prof. C. Dewey	21	75	12	6	36.8	3.17
Do	....do	Dr. M. M. Mathews	21	73	12	8	35.8	3.17
Warsaw	Wyoming	J. P. Morse	22	77	12	3	39.4	2.47
Buffalo	Erie	Wm. Ives	21	72	12	6	36.1	4.96
Jamestown	Chautauqua	Rev. S. W. Roe	20	78	5	0	38.1	3.80
NEW JERSEY.								
Paterson	Passaic	Wm. Brooks	21	72	6, 11	19	42.8	7.36
Newark	Essex	W. A. Whitehead	21	74	6	20	43.2	4.89
New Brunswick	Middlesex	Geo. W. Thompson	21	74	7	25	43.7	.....
Burlington	Burlington	John C. Deacon	16, 21	72	6, 11	22	41.2	4.40
Progress	....do	Thos. J. Beans	16	76	11	22	45.0	3.42
Mount Holly	....do	Dr. M. J. Rhees	21	74	11	23	46.2	.....
Seaville	Cape May	Barker Cole	21	70	10	20	45.3	5.20
Haddonfield	Camden	Jas. S. Lippincott	21	75	11	24	46.2	4.17
Greenwich	Cumberland	R. C. Sheppard	21	72	11	24	46.0	4.31
PENNSYLVANIA.								
Fallsington	Bucks	Ebenezer Hance	16	74	6, 11	24	45.7	4.60
Philadelphia	Philadelphia	Pf. J. A. Kirkpatrick	21	76	11	25	46.9	4.88
Germantown	....do	Thos. Meehan	21	76	11	20	.....	.....

Table showing the range of the thermometer, &c., for March—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
PENNSYLVANIA—C'd								
				°		°	°	*In.*
Moorland	Montgomery	Anna Spencer	21	73	11	22	44.6	4.99
Dyberry	Wayne	Theodore Day	21	72	6	1	34.9	.....
Nazareth	Northampton	L. E. Ricksecker	28	78	12	22	43.5	.....
North Whitehall	Lehigh	Edward Kohler	21	70	6	16	43.1	.....
Harrisburg	Dauphin	Dr. John Heisely	21	72	6, 11	25	45.2	5.78
Tioga	Tioga	E. T. Bentley	21	74	6	5	40.2	5.30
Pennsville	Clearfield	Elisha Fenton	21	78	11	7	38.6	6.24
Connellsville	Fayette	John Taylor	20	74	10	8	44.8	.....
Canonsburg	Washington	Rev. Wm. Smith, D.D.	20	71	10	20	42.8	5.10
DELAWARE.								
Wilmington	New Castle	Dr. Urban D. Hedges	21	74	11	21	47.1	7.70
MARYLAND.								
Woodlawn	Cecil	J. O. McCormick	21	70	11	20	46.0	6.10
Annapolis	Anne Arundel	Wm. R. Goodman	16	66	11	23	47.3	6.58
St. Inigoes	St. Mary's	Rev. J. Stephenson	21	71	11	30	48.7	.....
Sykesville	Carroll	Miss H. M. Baer	20, 21	73	11	15	43.4	6.50
SOUTH CAROLINA.								
Beaufort	Beaufort	Dr. M. M. Marsh	3, 23	78	11	40	58.2	7.11
Hilton Head	do	Capt. C. R. Suter	22	77	17	45	58.1	6.83
MISSISSIPPI.								
Natchez	Adams	Robert McCary	2, 7, 18	76	10	22	57.3	8.40
WEST VIRGINIA.								
Ashland	Cabell	C. L. Roffe	.....	.....	10	20	.....	.....
KENTUCKY.								
Louisville	Jefferson	Mrs. L. Young	15	77	10	15	49.5	7.86
Chilesburg	Fayette	Samuel D. Martin	15, 20	72	10	16	.....	5.88
Danville	Boyle	O. Beatty	15, 20	78	10	26	50.8	6.00
OHIO.								
Saybrook	Ashtabula	Jas. B. Fraser	20	71	5, 10, 12	9	38.2	.....
Austinburg	do	E. D. Winchester	20	73	5	6	37.9	3.15
New Lisbon	Columbiana	J. F. Benner	14, 20, 28, 29	70	10	8	41.4	5.44
East Fairfield	do	S. B. McMillan	20	71	10	11	41.8	5.56
Welshfield	Geauga	B. F. Abell, A. M	20	70	10	8	39.6	5.36
Milnersville	Guernsey	Rev. D. Thompson	20	75	10	10	43.0	4.38
Cleveland	Cuyahoga	Mr. and Mrs. G. A. Hyde.	20	74	10	13	41.6	2.62
Wooster	Wayne	Martin Winger	20	72	10	8	41.2	.....
Kelly's Island	Erie	Geo. C. Huntington	20	63	10	10	38.9	2.04
Norwalk	Huron	Rev. A. Newton	20	72	10	10	42.1	2.15
Westerville	Franklin	Pf. H. A. Thompson	20	70	10	18	45.2	3.73
Kingston	Ross	Pf. John Haywood	20	75	10	17	47.4	4.00
Portsmouth	Scioto	L. Engelbrecht	20	73	10	19	47.0	6.15
Toledo	Lucas	Dr. J. B. Trembly	20	72	10	8	40.2	1.75
Marion	Marion	Dr. H. A. True	20	70	10	9	42.1	.....

Table showing the range of the thermometer, &c., for March—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
OHIO—Continued.				°		°	°	*In.*
Urbana University	Champaign	Pf. M. G. Williams	20	72	10	9	43.4	4.68
Hillsborough	Highland	J. McD. Mathews	20	70	10	12	44.0	4.87
Ripley	Brown	Dr. G. Bambach	15, 20	75	10	18	49.1	7.32
Bethel	Clermont	Geo. W. Crane	15	74	10	16	40.6	4.01
Cincinnati	Hamilton	George W. Harper	15	75	10	15	47.3	4.40
College Hill	....do	John H. Wilson	15	74	10	10	45.2	6.25
Do	....do	John W. Hammitt	15	75	10	11	44.9	5.13
MICHIGAN.								
Pontiac	Oakland	James A. Weeks	20	70	10, 12	10	36.3	.....
Monroe	Monroe	Miss F. E. Whelpley	20	68	10	15	38.8	3.13
State Agric'l College	Ingham	Prof. R. C. Kedzie	20	68	10	9	37.0	2.79
Alpena	Alpena	John W. Paxton	31	51	11	—10	.....	.....
Homestead	Benzie	G. E. Steele	27	58	12	— 1	.....	3.66
INDIANA.								
Vevay	Switzerland	Chas. G. Boerner	20	78	10	16	48.8	4.82
Pennville	Jay	Miriam Griest	21	68	10	5	44.4	.....
New Castle	Henry	T. B. Redding, A. M.	20	74	10	4	42.0	6.33
Spiceland	....do	Wm. Dawson	20	73	10	7	43.8	6.20
Madison	Jefferson	Rev. S. Collins	15, 20	74	10	20	50.2	12.00
New Albany	Floyd	Dr. E. S. Crozier	18	94	10	14	46.3	3.15
Indianapolis	Marion	W. W. Butterfield	20	74	10	8	43.6	.....
Rensselaer	Jasper	Dr. J. H. Loughridge	20	72	10	0	39.2	3.78
New Harmony	Posey	John Chappellsmith	20	76	10	16	48.2	4.93
ILLINOIS.								
Chicago	Cook	Samuel Brookes	20, 31	64	10	— 2	32.9	.....
Riley	McHenry	E. Babcock	31	63	10	— 8	32.8	4.60
Sandwich	De Kalb	Dr. N. E. Ballou	31	68	10	0	37.9	3.82
Ottawa	La Salle	Mrs. E. H. Merwin	20	74	9	0	36.5	3.15
Clinton	De Witt	C. H. Moore	.....	.....	9	7	.....	.....
Winnebago	Winnebago	James W. Tolman	31	62	10	— 5	32.7	3.58
Wyanet	Bureau	E. S. Phelps	19	69	10	0	36.0	3.13
Tiskilwa	....do	Verry Aldrich	19, 31	66	10	3	39.5	.....
Elmira	Stark	O. A. Blanchard	19	68	9	1	37.0	2.31
Hennepin	Putnam	Smiley Shepherd	19	60	10	— 2	31.0	.....
Peoria	Peoria	Frederick Brendel	31	67	10	8	40.5	3.57
Pekin	Tazewell	J. H. Riblett	20	71	10	7	40.1	3.74
Springfield	Sangamon	G. M. Brinkerhoff	17, 20, 31	70	10	10	45.2	.....
Waverly	Morgan	T. Dudley	19, 20	70	9, 10	10	41.3	5.55
Murrayville	....do	Dr. John and Miss Grant.	19, 20	70	.....	.....	.....	.....
Galesburg	Knox	Prof. W. Livingston	19	67	10	3	35.1	3.52
Augusta	Hancock	S. B. Mead, M. D.	19	69	9	0	38.2	4.02
WISCONSIN.								
Manitowoc	Manitowoc	Jacob Lüps	30	56	10	— 1	31.1	3.12
Milwaukee	Milwaukee	I. A. Lapham, LL.D.	28, 31	58	10	— 5	31.8	3.89
Do	....do	Carl Winkler	28, 31	58	10	1	31.8	3.19

Table showing the range of the thermometer, &c., for March—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
				°		°	°	*In.*
WISCONSIN—Cont'd.								
Green Bay	Brown	Freid'h Deckner	20, 31	55	8	— 1	27.8	2.57
Geneva	Walworth	William H. Whiting	20	60	10	— 5	32.5	.....
Delavan	....do	Leveus Eddy	20	60	10	— 4	32.0	3.52
Waupacca	Waupacca	H. C. Mead	30	64	3	— 5	29.7	.....
Embarrass	....do	E. Everett Breed	29, 30	48	3	— 2	27.5	.....
Rocky Run	Columbia	W. W. Curtis	30	59	10	— 3	30.7	3.56
Baraboo	Sauk	M. C. Waite	30	60	10	0	33.6	.....
Beloit	Rock	Henry D. Porter	31	58	10	— 4	32.1	1.62
MINNESOTA.								
Beaver Bay	Lake	C. Wieland	21, 22	48	11	—13	23.4	1.16
Itasca	Anoka	John Fleming	19, 27	56	4	—30	25.0	.....
St. Paul	Ramsey	Rev. A. B. Paterson	30	57	4	—26	24.9	2.10
Minneapolis	Hennepin	Wm. Cheney	30	56	4	—27	24.3	.....
New Ulm	Brown	Charles Roos	30	58	4	—18	23.6	2.45
IOWA.								
Lyons	Clinton	Dr. P. J. Farnsworth	19	64	9	— 9	33.2	7.50
Dubuque	Dubuque	Asa Horr, M. D	20	61	10	— 2	32.0	3.33
Muscatine	Muscatine	J. P. Walton	19	64	9	— 4	33.7	2.76
Fort Madison	Lee	Daniel McCready	31	68	9	— 2	36.8	3.78
Monticello	Jones	Chauncey Mead	30	60	9	— 8	29.1	3.50
Guttenberg	Clayton	Philip Dorweiler	30	57	9	— 3	27.8	2.60
Mount Vernon	Linn	Prof. Alonzo Collins	19	63	9	— 5	31.7	.....
Iowa City	Johnson	Prof. T. S. Parvin	19	70	9	— 5	34.3	3.92
Independence	Buchanan	A. C. Wheaton	30	60	9	—11	28.3	6.10
Do	....do	D. S. Deering	19	60	4	— 6	29.5	.....
Waterloo	Black Hawk	T. Steed	19, 30	58	9	— 6	31.0	.....
Iowa Falls	Hardin	N. Townsend	20, 22, 26, 31	52	4	—15	26.3	.....
Algona	Kossuth	Dr. and Miss McCoy	30	56	4	—14	24.6	1.50
MISSOURI.								
St. Louis University	St. Louis	F. H. Stunteback	17	71	9, 10	16	46.9	6.45
St. Louis	....do	Geo. Engelmann	17	71	10	14	45.5	8.61
Allenton	....do	Aug. Fendler	19	73	10	8	43.5	8.87
Athens	Clark	J. T. Caldwell	19	80	9	— 1	38.0	.....
Canton	Lewis	George P. Ray	19	75	9	— 2	37.2	.....
Harrisonville	Cass	John Christian	20	74	9	— 4	40.5	3.43
KANSAS.								
Olatha	Johnson	H. Beckwith	19	74	9	—16	38.3	3.65
Agricultural College	Riley	H. L. Denison	19	74	9	— 8	42.0	2.27
Fort Riley	Davis	C. E. Sullivan	19	76	9	1	40.1	.....
NEBRASKA TER.								
Elkhorn	Washington	John S. Bowen	19	64	9	—15	30.0	.....
Bellevue	Sarpy	Rev. Wm. Hamilton	20	64	9	—15	33.1	0.25
Nursery Hill	Otoe	R. O. Thompson	19	62	9	—14	31.3	3.86
CALIFORNIA.								
Sacramento	Sacramento	Thos. M. Logan, M. D	31	71	2, 3	35	54.6	0.48
Monterey	Monterey	C. A. Canfield, M. D	22	73	3	37	51.1	0.31

Table showing the range of the thermometer, &c., for March—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
UTAH.				°		°	°	*In.*
Great Salt Lake City	Great Salt Lake.	W. W. Phelps.....	24	62	9	6	37.7	2.38
St. George.....	Washington	Geo. A. Burgon	23	78	3	24	49.1	0.01
Addenda—February, 1865.								
CALIFORNIA.								
Sacramento.....	Sacramento	Dr. Thos. M. Logan.	11	57	4	38	49.1	0.53
Meadow Valley	Plumas.....	Mrs. M. D. Smith ...	11	52	3, 22, 26	11	31.6	4.45
UTAH TERRITORY.								
St. George.....	Washington	George A. Burgon..	17	63	22	19	39.5	0.83
WASHINGTON TER.								
Neeah Bay	Clallum	James G. Swan.....	10	48	28	24	37.0	9.30
ARIZONA TER.								
Fort Whipple.....	Yavapai	Dr. Elliott Cones....	17	69	27	0	37.6	.....

Table showing the average temperature and fall of rain (in inches and tenths) for the month of March for each of the years named, and for the five years first named, collectively, with the average number of places in each State in which the observations were made.

States and Territories.	Av. number of places.	Averages, 1855.		Averages, 1856.		Averages, 1857.		Averages, 1858.		Averages, 1859.		Av. for five years.		Averages, 1863.		Averages, 1864.		Averages, 1865.	
		Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.
		Deg.	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*
Maine	7	27.6	1.20	24.6	1.67	28.3	7.17	28.2	2.66	32.4	9.68	28.2	4.48	23.7	4.68	31.7	4.90	33.3	5.09
New Hampshire	4	30.9	6.36	25.3	1.19	30.7	2.06	29.5	1.22	32.5	6.51	29.8	3.47	23.0	3.50	30.1	2.76	35.2	4.27
Vermont	6	28.4	0.72	22.2	1.27	27.0	2.24	26.5	1.43	33.8	4.18	27.6	1.97	19.8	3.72	31.7	2.30	38.7	4.35
Massachusetts	9	32.1	1.69	26.4	1.46	31.3	2.61	32.1	1.81	38.4	5.99	32.1	2.71	27.7	5.78	33.4	3.76	38.0	5.26
Rhode Island	1	32.6	0.86	29.2	1.55	32.2	3.35	32.8	2.05	40.6	8.00	33.5	3.16	31.7	4.45	.....	.....	.....	.....
Connecticut	4	33.4	0.96	28.3	1.47	32.2	2.66	31.9	2.20	39.6	8.31	33.1	3.12	28.5	5.83	36.1	2.09	38.6	5.00
New York	12	30.5	1.53	25.7	1.82	31.0	2.57	32.3	1.18	39.3	5.00	31.8	2.42	27.7	3.45	33.4	2.71	38.5	4.20
New Jersey	6	36.8	1.83	30.6	1.74	35.9	3.12	37.4	1.40	45.8	6.40	37.3	2.90	34.1	5.25	37.5	3.88	44.4	4.82
Pennsylvania	7	34.6	2.04	29.2	1.73	35.2	1.63	37.1	0.95	44.5	5.59	36.1	2.39	34.5	5.67	35.9	4.75	42.8	5.27
Delaware	1	.....	.....	29.4	.....	35.6	.....	45.6	0.37	.....	7.05	36.9	3.71	.....	.....	.....	.....	47.1	7.70
Maryland	3	39.0	3.62	33.5	1.78	38.4	1.62	39.2	0.85	48.8	5.42	39.8	2.66	37.6	3.64	37.9	3.52	46.4	6.39
District of Columbia	1	41.6	.....	35.4	1.79	39.1	1.91	41.9	1.03	49.6	3.80	41.5	2.14	40.5	6.04	40.3	4.43	.....	.....
South Carolina	4	53.3	3.75	51.2	5.88	51.1	2.64	59.9	1.97	57.5	4.51	54.6	3.75	.....	.....	55.0	2.59	58.2	6.97
Tennessee	2	44.9	3.23	41.3	1.67	46.9	0.74	51.3	4.38	54.3	5.24	47.7	3.05	47.4	5.03	.....	.....	.....	.....
Kentucky	1	40.2	5.22	36.0	1.01	39.9	0.56	44.1	1.30	51.2	3.96	42.3	2.41	43.0	4.13	43.6	2.35	50.2	6.58
Ohio	15	35.4	2.80	29.8	1.92	34.5	1.21	37.4	1.36	45.9	4.30	36.6	2.32	34.4	2.97	36.0	2.38	42.8	4.37
Michigan	7	30.3	2.32	22.1	0.99	27.7	1.23	34.8	3.31	38.0	4.07	30.6	2.38	29.8	2.48	33.2	2.19	37.4	3.19
Indiana	6	37.0	4.40	34.3	0.58	37.1	1.25	42.2	2.04	47.2	4.06	39.6	2.47	38.7	3.79	36.7	2.56	45.2	5.89
Illinois	13	34.8	2.66	31.7	0.59	32.1	2.42	40.3	2.85	42.2	4.94	36.2	2.69	35.4	2.71	39.2	2.12	37.1	3.73
Wisconsin	10	27.5	1.83	24.8	0.32	27.5	1.04	34.7	1.81	35.2	4.26	29.9	1.85	30.2	2.04	31.1	1.55	31.0	3.07
Minnesota	2	25.6	.....	21.1	.....	22.9	1.00	33.7	1.16	30.2	3.03	26.7	1.73	28.9	0.63	27.0	1.42	24.2	1.90
Iowa	10	30.9	1.45	26.3	0.93	29.6	2.11	40.1	2.06	40.6	4.45	33.5	2.20	33.1	1.91	32.6	2.58	30.6	3.89
Missouri	4	39.4	2.45	37.4	1.06	39.5	1.80	48.2	3.53	48.4	7.32	42.4	3.23	43.2	3.17	40.8	1.67	41.9	6.84
Nebraska Territory	2	.....	.....	.....	.....	.....	.....	44.7	1.80	39.8	1.73	42.2	1.76	36.1	0.50	34.0	.....	31.5	2.06
Kansas	2	.....	.....	.....	.....	37.2	2.60	48.0	2.58	46.6	2.78	43.9	2.65	44.4	.....	40.0	1.59	40.1	2.96
California	2	56.3	4.26	57.5	1.10	56.3	0.74	54.4	3.25	51.6	2.35	55.2	2.34	53.4	2.85	.....	.....	52.9	0.40

NOTES OF THE WEATHER MARCH, 1865.

St. John, New Brunswick.—March was an unusually pleasant spring month. Its temperature was mild and equable, and it had no very violent or severe storms, and no sudden or extreme changes of any kind. Its mean temperature was about two and a half degrees above that of 1864.

West Waterville, Maine.—March 20.—Robins appeared to-day; said to have been seen in other parts of the town several days ago, but it may have been a mistake.

Lee, Maine.—March 22.—Robins first seen.

Lisbon, Maine.—March 20.—Robins singing. 23d, sleighing all gone; fields quite bare, but considerable snow in the woods. 21st, ice commenced going out of the Androscoggin. 27th, ice all out as far up as Lewiston; mail carrier crosses in small boat; ice all gone from Sabbatis. 31st, some snow under the fences, and considerable in the woods; but very little frost in the ground; streams lower than usual at this season.

Cornishville, Maine.—March 31.—Ground mostly bare of snow.

Gardiner, Maine.—March 17.—Sleighing gone. 18th, robins appeared. 22d, river opened below Gardiner. 24th, river opened above Gardiner.

For the four winter months, December, 1864, and January, February, and March, 1865, the following statistics may be noted:

Total amount of snow (including 2 inches in November) 79½ inches; the average of the previous 27 years being 86.12 inches; the maximum in 1842–'43, 145¾ inches, and the minimum 30⅔ inches in 1837–'38. The amount in 1863–'64 was 49¼ inches.

The river has been closed below Gardiner 100 days; above, 104 days. The mean for the previous 28 years (below Gardiner) being 120$\frac{22}{28}$ days. The maximum time has been 141 days in 1842–'43, and the minimum 96 days in 1841–'42. The record of the opening and closing of the river has been kept for nearly all the years since 1785, but none of these figures are materially changed by the extended time. The number of days of good sleighing has been 96; average number of previous 28 years, 79$\frac{13}{28}$. Maximum, 1851 '52, 126 days. Minimum, 1839–'40, 16 days.

The whole number of nights at or below zero has been 21, the mean being 21$\frac{18}{28}$. Maximum, 1855–'56, 59; minimum, 1852–'53, 9. Mean heat of the four winter months, 23.99°; average of same for previous 28 years, 22.68°. Maximum, 1841–'42, 27.76°. Minimum, 1853–'54, 19.67°.

The average time for the opening of the river at Gardiner is about April 6; taking place this year 15 days earlier. The earliest opening recorded is March 15, 1806; the latest, April 24, 1785. The early opening of this year was caused mainly by the mass of snow upon the ice preventing the formation of black ice below. The thickness of black ice on fairly exposed parts of the river has not been above 6½ inches; while, when the snow has been kept clear, it has been 22½ inches.

The ground has been very little frozen when well protected by the snow; where this disappeared the ground was free from frost. Temperature of river February 6, 32.18°; February 15, same; February 22, 32.27°; March 11, 32.63°; March 18, (after rain, river swollen with melted snow,) 32.27°.

Steuben, Maine.—March 10.—Sleighing broken up. 11th, high freshet.

Shelburne, New Hampshire.—March 20.—Robins arrived. 27th, Androscoggin river open here, but frozen fifteen miles below as late as April 1.

Claremont, New Hampshire.—On the night of the 16th March about an inch of rain fell on the soft snow, which vanished more rapidly than the oldest resident remembers having happened before. The melting snow and rain raised the water in Sugar river above all former high-water marks, while the ice in

the stream all went out. The same may be said of Connecticut river, into which the Sugar empties. No damage of consequence was done in this neighborhood. The thaw continued, so that in a week the ground was bare of snow, and the spring as far advanced as is usual five or six weeks later. The ground now (April 3) is in as good order for the plough as it usually is on the 1st of May.

Exeter, New Hampshire.—March 1.—Heavy mass of snow on the ground. 17th, robins appear. 31st, the season is quite advanced, and March has been almost as mild and pleasant as the month of April. Snow has long since disappeared, and the earth is ready for the plough.

Barnstead, New Hampshire.—March 16, 17.—Opening of rivers; great freshet in all parts of the State heard from. 18th, Merrimac river much higher than ever known before.

Stratford, New Hampshire.—March 29.—First appearance of robins.

Craftsbury, Vermont.—March 20.—First appearance of robins. Farmers commenced tapping their sugar orchards.

Middlebury, Vermont.—March 1.—Snow is three feet deep; no frost in the earth below the snow. 18th, Otter creek broke up. 19th, first robins seen. 20th, water very high. Good sleighing from December 10 to March 16—ninety-six days. 31st, the buds on fruit and forest trees are swelling; the season is a month earlier than usual; danger to fruit is apprehended from frosts.

Lunenburg, Vermont.—March 17, 18.—Heavy thaw; brook very high. 23d, sleighing gone; good until this morning, but thawed very fast during the day. River high, but ice out only in swift water. Ice is very poor and spongy. Brooks not as high as in thaw of the 17th and 18th, but river is higher. Ground not much frozen. 23d, robins first seen.

Westfield, Massachusetts.—March 16.—First robin seen. 19th, crocus in blossom. 31st, the average temperature of the month is greater than it has been in March since 1859.

Mendon, Massachusetts.—March 5.—Robins appeared. 7th, all wells are very high. 31st, grass beginning to look green.

Worcester, Massachusetts.—March 21.—Crocus in flower.

New Bedford, Massachusetts.—March 5.—River clear of ice to head of navigation, except at the angle formed by the east abutment of the bridges. 14th, robins begin to be heard. 25th, crocus flowers begin to show their petals.

Sandwich, Massachusetts.—March 4.—Ice on the pond broke up during the high wind. The pond has not broken up before since it first froze over on the 13th December. This is very rare here. The ice was from ten to twelve inches in thickness. The ground here has in some places been frozen thirty-three inches deep. The frost must be nearly all out now. 15th, frost all out of the ground everywhere.

Newbury, Massachusetts.—March 7.—Sleighs have been mostly in use till to-day. 15th, robins about. 25th, the frost is nearly out, and the ground pretty much settled.

Georgetown, Massachusetts.—March 4.—Robins in the woods; in open ground on the 6th. 20th, Merrimac river at Haverhill free of ice; began to open on the 17th. 25th, earth generally free of frost; a few patches of snow to be seen, perhaps half a dozen in a circuit of several miles. March closes three weeks earlier than the average for perhaps 25 years.

Colebrook, Connecticut.—March 13.—Robins seen this morning. 17th, ice gone from the streams; snow nearly gone. 22d, thunder storm at 8 a. m., southwest. Good sleighing from the 10th of December to the 9th of March.

Pomfret, Connecticut.—This has been the warmest March except two in thirteen years, viz., 1859 and 1860. The season is considerably earlier than usual in appearance.

Middletown, Connecticut.—March 8—Ice moving from the Connecticut river.

Nichols, New York.—March 5.—Ice broke up and went down the Susquehanna river, eight miles above this village, and dammed up at Towanda dam, Bradford county, Pennsylvania, and did much damage to the Shequin flats, eight miles above. 17th, Susquehanna river higher by from three to four feet than before in forty-five years, and many say four feet higher than ever before. Fences, lumber, small buildings, bridges and mills were swept down stream.

Beverly Philipstown, New York.—The weather this month has been more than usually uniform, and the average temperature mild. This has advanced spring operations on the farm about ten days before former years.

South Hartford, New York.—March has been rather warmer than the average of this month for previous years. At the beginning of the month the snow was full three feet deep. By the 12th rains had settled it to the depth of twenty inches. At this time commenced the great freshet, which has been most memorable for its destructiveness. 17th, ice in Hudson river broke up last eve; bridges and dams swept off. The snow, which four days since was twenty inches deep, is now nearly gone. 19th, the last remains of snow melting from the most sheltered positions. Wood creek (tributary to Lake Champlain from the south) has overflowed its banks, doing much damage to barns, houses, bridges, &c. 21st, first boat from New York arrived at Albany. The remarkable feature of the past winter in this section is the total absence of frost from the ground; posts can be set without inconvenience.

Theresa, New York.—March 17.—The water in Indian river is twelve and a half feet above low water mark, which is the highest ever known by eighteen inches. It has carried away a bridge, a dam, an iron foundry, a two-story joiner shop, and a fulling mill, besides other minor things. 18th, robins first seen, considerable numbers. Snow mostly gone; there was no frost in the ground when the snow left.

South Trenton, New York.—March 15.—First robin. 18th, tremendous flood, enormous amount of damage done; four lives lost. 19th, flood continues; railroad and telegraph communication suspended. 20th, flood decreasing, cars running. 21st, telegraph communications resumed. 31st, snow all gone, except in gulleys and localities of drifts. This has been quite a pleasant month for business. Have not had the usual amount of winds this month compared with other years.

Moriches, New York.—March 18.—The song of the robin first heard.

Jamestown, New York.—March 14.—Robins first seen, snow melting rapidly, no frost in the ground. 16th, snow almost gone. This morning the first thunder storm of the season came from the west. The streams are very high. Chautauqua lake and outlet were never known so high. Only patches of snow here and there to be seen.

Gouverneur, New York.—March 16.—Robins made their first appearance this morning. 17th, one-fourth of the ground in the fields is bare. 18th, ground mostly bare, no snow left except in shady places, the ice broke up in the Oswagatchie river.

Oswego, New York.—March 17.—Robins arrived; snow gone, and great flood all over the State; weather unusually mild, and far in advance of other years.

Cazenovia, New York.—March 16.—Snow commenced melting. 17th, Chittenango creek reached maximum height, and all the bridges but one (twenty in number) carried away during the night, besides dams and mills. 31st, Cazenovia lake still frozen except the lower fifth, about one mile. It froze up December 13th.

Skaneatzeles, New Jersey.—March 10 to 15.—Thaw and great flood, with great destruction of property and life.

Rochester, New York.—March 17.—River higher this forenoon than ever known before; two feet on Exchange street in front of Genessee Valley railroad depot; lumber yards all afloat. 18th, water flowing over Main street bridge and through the arcade, it is said, to the depth of five feet. The New York Central railroad bridge, over the river, went off last evening; the race bridge on Court street, West creek, was carried away yesterday afternoon. The water attained its maximum at about 9.30 a. m., and was within one foot of the top of the hitching-post in front of the office. The towing-path of the canal entirely submerged, and water flowing over the entire canal into Buffalo street in great quantities, and that street is completely flooded. Spring alley a perfect mill-race, at least two and a half feet deep at the Spring street crossing. The water commenced falling at about noon, and at 1 p. m. showed one and a half inches fall. 19th, 2 p. m., water has fallen about three feet. 20th, 7 a. m., the water has disappeared entirely from the yards and alleys in this neighborhood, and also from the cellars, but leaving all in a desolate condition.

Fishkill, New York, March 8.—Ice moved in Newburn bay. 14th, river opened through to New York. 17th, snow went off very gently; freshet not high, and ice broke up without damage. 18th, frost entirely out of the ground. 21st, commenced ploughing.

Palermo, New York.—March 1.—Depth of snow on the ground three feet. 16th, seven inches of snow fell; trees badly loaded; hard rain before the snow. 17th, last day of sleighing, having lasted ninety-one days. 18th, the oldest inhabitants say they never recollect of seeing such a body of snow melt away in so short a time as it has for a few days past; streams are swollen higher than ever known before. March 31, this has been the warmest March during the past five years. The depth of frost in the ground this winter did not exceed an inch and a half at any time, as the snow came on before the ground froze.

Newburg, New York.—March 6.—People on the ice for the last time in Newburg bay, north side ferry track. 10th, about half past two p. m. the ice in Newburg bay, which for the last two or three days had been quite poor, floated away with the ebb tide, and the bay is for the first time clear of ice.

Auburn, New York.—On the 15th March there was a very warm rain of nine hours' duration, which very rapidly melted the heavy snow on the ground, causing a great flood in the Owasco lake and river, overflowing their banks, and carrying off bridges, dams, buildings, &c. The lake was four feet higher than ever known before; Cayuga lake and Seneca river were three feet higher than ever before. Nothing of the kind has been previously known in this county. The heavy body of snow the past winter has saved the wheat for 1865.

New Brunswick, New Jersey.—March 7.—Frost not out of the ground; snow lying in northern exposures. 8th, robins appeared this morning; some wintered here this season.

Seaville, New Jersey.—March 2.—The frost is all out of the ground, which has been frozen to the unusual depth of twenty-two inches. 7th, first robin observed.

Progress, New Jersey.—March 8.—Robins first heard. 18th, waters of river higher than they have been during the past seven years. 23d, first thunder and lightning; one discharge in the west, distinct.

Newark, New Jersey.—Only one March (1859) in the preceding twenty had a higher mean temperature, and a higher maximum was recorded in only four—1845, 1851, 1854, and 1860. The amount of water deposited was more than an inch above the average for the month, a greater quantity having fallen in March only in the years 1859, 1861, and 1863, since 1843. In New Jersey no damage was sustained by the freshet, so destructive in New York and Pennsylvania, about the middle of the month.

Greenwich, New Jersey.—The month was much more mild than any previous

March for several years. No frost in the ground, except for a few hours on the mornings of the 6th and 11th. Vegetation has come forward rapidly, and is several weeks in advance of what it was at this time last year.

Burlington, New Jersey.—March 23.—A high wind, with showers of snow, rain, and hail; about six o'clock a shower passed to the north, with thunder and lightning, the first thunder of the year.

Passaic Valley, New Jersey.—March 8.—Depth of frost in ground where rye was sown last year fifteen inches. Robins appear. 31st, heavy thunder, accompanied with rain during the night.

Byberry, Pennsylvania.—March 1.—Frost about all out of the ground. 5th, ground frozen this morning; also on the 11th, 12th, and 24th. Thunder shower, with high wind, rain. and hail, in the afternoon of the 23d.

Dyberry, Pennsylvania.—March 5.—Streams full, and the ice going out. 9th, streams high; sleighing, which has been good twelve weeks, is now getting poor. 15th, fields getting bare of snow; streams rising. 17th, most of the snow has melted the past three days, making a flood, which has swept away a few bridges and some lumber. The streams are falling. 29th, frost out of the ground, and a few trees and plants beginning to blossom.

Fleming, Pennsylvania.—March 5.—The ice breaking in the Bald Eagle creek; quite an ice flood in the Susquehanna river. 14th, robins made their first appearance. 15th, quite a flood to-day in Bald Eagle creek. 17th, terrible flood last night; the warm rain of last evening brought the remainder of the snow from the mountains, sweeping everything before it—fences, bridges, houses, railroads, &c. The most destructive flood for many years.

Canonsburg, Pennsylvania.—March 8.—Robins appear. 11th, thunder and lightning from 12 m. to 1 p. m.

Horsham, Pennsylvania.—March 23.—Quite a hail storm this evening, accompanied by one bright flash of lightning, followed by a sharp peal of thunder. March 26th, some gardening done during the week; farmers generally ploughing.

Germantown, Pennsylvania.—March 1.—The ground is entirely free from frost, except in shady places where the rays of the sun do not have access.

Pennsville, Pennsylvania.—March 1.—Snow on the ground twelve to twenty inches in depth; very cold; roads much blocked with drifts. Thawing has commenced, but no break up yet, and but little rise in the waters. 5th, river well up, ice breaking, but not gone. 7th, robins first seen; snow still one foot or more in the fields, much deeper in the woods; a few bare spots at the heads of springs. 9th, old snow still very stiff and deep in the woods, (about two feet,) difficult and dangerous to put horses through it. 14th, snow going fast; heavy rain and melted snow fell on the 15th and 26th, causing a very high and destructive flood. 31st, there are still piles of snow lying in the lanes and along the fences, also in the woods; but grass is coming forward and the fields and meadows are getting green.

Sykesville, Maryland.—March 7.—Robins seen. 14th, crocuses in bloom. 30th, lightning from 7 to 9 p. m., afterwards thunder-gust till midnight, with very hard rain. The lightning was very vivid during part of the gust.

St. Inigoes, Maryland.—March 28.—Cherry trees in bloom. 30th, peach and apple trees in bloom.

Beaufort, South Carolina.—March 10. Peach trees in bloom. 24th, orange trees in bloom.

Chilesburg, Kentucky.—March 8.—Saw the first robins. 31st. March has been a very disagreeable, rainy month; wet weather has hindered farm work, but vegetation of all kinds is very forward. The water-courses have been ve y high. Kentucky river, (five miles distant,) was out of its first bank, and did much damage in sweeping off houses, fences, and corn, that were on the second bottoms.

Wooster, Ohio.—March 15.—Diffuse lightning in the northwest at 8.20 p. m., the first lightning this season. 21st, distant thunder in the west at 6.35 p. m., the first of the season.

Saybrook, Ohio.—The mercury during the past winter for ninety-three days, or from December 4, 1864, to March 6, 1865, both inclusive, did not rise above 46°; on February 13th, the mercury touched 15° below zero, and on March 20th, reached 71° above zero, making a range of eighty-six degrees in five weeks.

Welshfield, Ohio.—March 2.—Robins arrived. 19th, frost out of the ground. 21st, first lightning of the season. 23d, first thunder storm occurred this morning. It was not severe, but attended with snow and hail.

Kelly's Island, Ohio.—March 15.—Lightning in west and southwest. 17th, channel clear of ice; lights in light-house for first time this season. 20th, steamer Island Queen came from Sandusky this afternoon, first trip of the season.

Urbana, Ohio.—March 2.—Robin returns. 15th, thunder from 4 p. m. to 6¼ p. m.; at 6 p. m. light hail about 1 minute. This is the first thunder since September 23d, a period of 174 days. Lightning all the evening in the northwest. 16th, ice just off the ponds, having covered them since December 8th, making ninety-eight days. On the 14th of February it was sixteen and a half inches thick. 22st, thunder from 3½ to 5 p. m. 26th and 27th, ice. The mean temperature of this month is higher than that of any March since 1859; in that year it was more than two degrees higher than this.

Kingston, Ohio.—March 5.—Saw robins this morning.

Hillsboro', Ohio.—March 21.—Storm of thunder, wind, rain, and hail, at 4 p. m.

Westerville, Ohio.—March 21.—A sudden and unusual storm this evening. A very high wind from the southwest, driving the clouds very rapidly before it. Rain falling profusely, accompanied with loud thunder and vivid lightning, and a little hail.

Portsmouth, Ohio.—March 2.—Robins appear. 3d, river falling in the forenoon, rising rapidly in the afternoon, now over the tow path; steady rain. 4th, upper end of the city inundated; people moving out of their houses. 5th, cellars on Front street have water in them, river still rising. 6th, water in cellars from two to eight feet deep. 7th, river falling this forenoon, not up as high by twelve inches as in 1862. 18th, violent wind during last night; river rising very fast; upper end of the city again inundated. 20th, river not so high as on the 7th. At 5 p. m. a storm came up from the southwest, passed over here doing some damage to buildings and shipping; the heaviest of it lasted about three minutes; accompanied with hail, rain, thunder and lightning. It appeared to be more severe one mile west of here. It carried the water out of the river apparently twenty feet high. Trees in the bend of the river were snapped off like pipe-stems. 22d, violent wind last night and to-day; steamers compelled to lay over.

Austinburg, Ohio.—March 7.—Robins appeared.

East Fairfield, Ohio.—March 6.—First appearance of robins.

Toledo, Ohio.—March 4.—Ice came down the river and blocked up in front of the city. 13th, ferry boat made her first trip to-day. 16th, robins first seen.

New Lisbon, Ohio.—March 2.—Robins appeared this morning.

Lansing, Michigan.—March 15.—Cedar river clear of ice; thunder storm in evening. 16th, robins appeared. 21st, thunder storm in the evening, with high wind and a little hail.

Homestead, Michigan.—March 28.—Snow twenty-one inches deep in the woods. 29th, saw the first robin.

Pontiac, Michigan.—March 11.—Robins appeared. 16th, snow gone except heavy ice banks. 19th, frost out of ground; roads settling.

Veray, Indiana.—March 21.—Strong gale blowing from the west; sky dark and lowering; clouds moving rapidly from the southwest; severe thunder storm, accompanied with rain and some hail, which lasted nearly all the forenoon, the wind blowing a violent gale. The thermometer fell thirty degrees, commencing at 2 p. m., when it stood at 70°, and falling to 40° at 8 p. m., where it remained stationary.

Indianapolis, Indiana.—March 30.—Violent wind from 8 to 9½ p. m., blowing down small trees from 3 to 8 inches in diameter; also several business signs, house roofing, &c.

Pennville, Indiana.—March 1.—The ground has been frozen since the 10th of December; greatest depth fifteen inches. 2d, frost all out of the ground. 12th, ground frozen solid. 15th, vivid lightnings in the northwest at 7 p. m.; showery all day.

Madison, Indiana.—March 15.—Three distinct reports of thunder about 2 p. m. 30th, heavy thunder storm about 7½ a. m.; very heavy rain, causing destructive freshets on the small streams. The month has been remarkably mild; very little freezing, except on and about the 10th.

New Albany, Indiana.—March 8.—Thunder and lightning at 11 45 p. m. 15th, robins singing this morning. Crocus in bloom in the open air. March 21, turned suddenly cold this afternoon with high wind from the northwest. March 31, many of the forest trees quite green.

Wyanet, Illinois.—March 7.—Light thunder shower about two o'clock this morning. 14th, thunder in the east from 7 to 9 a. m. 19th, robins first heard. 20th, showery all day; occasional thunder.

Ottawa, Illinois.—March 1.—Ground frozen to the depth of three feet, but the frost is all coming out with the present thaw. Illinois river entirely clear of ice. Robins have returned to their old haunts. 7th, thunder storm from the northwest; lightning diffuse; thunder distant. 14th, rain; distant thunder, and a dense fog. Illinois and Fox rivers overflowed their banks. 15th, rain continues; the ravines, or what are commonly called the river bottoms, are all under water. There is now one of the largest freshets ever known here. Both rivers commenced rising rapidly on the 14th, and at noon to-day reached their highest elevation. This afternoon the flood abated, and now at eventide has fallen two feet. The rivers being free of ice, no serious damage can be done, excepting the removal of fences. 21st, rain, diffuse lightning and distant thunder. 25th, ice quarter of an inch thick.

Springfield, Illinois.—March 15.—Thunder storm at 5½ p. m. from the southwest to northeast, violent for the time of year.

Tiskilwa, Illinois.—March 14.—Thunder at 7 a. m., and again with lightning at 3½ p. m. 16th, every pond and low ground full of water. Bureau creek was never higher than now. Frost not half out of the ground yet; about one week of sunshine and mild weather would bring most of it out. 20th, thundered once in the south at half past ten o'clock this morning.

Waverly, Illinois.—March 6.—First appearance of robins. 10th, greatest depth of frost in the ground this month five and a half inches. 14th, first thunder storm of the season came up from the west and northwest at half past 5 p. m., with zigzag lightning. It changed to a northeaster, and continued twenty-six hours.

Galesburg, Illinois.—March 14.—Thunder at 6½ p. m. in the southwest. 23d, robins appeared.

Peoria, Illinois.—March 14.—Thunder shower at 3½ p. m.

Murrayville, Illinois.—March 14.—Thunder from west from 4 to 5 p. m., accompanied with heavy rain.

Augusta, Illinois.—March 13.—Robins seen. 14th, rain with thunder and lightning from 11.45 a. m. to 4 p. m. 19th, frost about out of the ground.

Winnebago, Illinois.—March 9.—Cold very severe for the season. Rock river again closed at Rockford. 13th, heavy storm of snow and rain; the most severe storm of the season; seven inches of snow fell. 17th, river again open at Rockford. 18th, First appearance of robins.

Ellmore, Illinois.—March 13.—Diffused lightning. 14th, thunder. 15th, Spoon river is the highest that it has been for seven.

Riley, Illinois.—March 18.—Frost yet two feet; greatest depth two feet and a half. 19th, robins appeared. 21st, the frost is so much out of the ground that the water settles away and the ground is drying.

Pekin, Illinois.—March 14.—A flash of diffused lightning at 5 p. m. followed by a roll of thunder, near and to southeast of the zenith; three more rolls of thunder to southeast before 5.50 p. m.

St. Louis, Missouri.—March 1.—At 6½ p. m. lightning in the west; a little before 8 thunder and lightning with rain; lightning continued till 8½; about 9 rain ceased. 7th, rain with thunder and lightning from 5 to 5½ a. m. During nearly a whole week the clouds have been constantly moving from the west or nearly so, while during the same time the wind has been shifting to all points of the compass.

Allenton, Missouri.—Thunder and lightning on the 1st from 6.30 to 8 p. m; on the 7th from 4. 30 to 4.45 a. m., and on the 7th from 4 to 4.10 p. m. Distant thunder on the 14th at 8.45 p. m.

Canton, Missouri.—March 5.—Robins first seen. 13th and 14th, steady rain, with occasional thunder. 20th, very large mosquitos, pretty thick in the afternoon.

Milwaukee, Wisconsin.—March 21. Ice left the Milwaukee river to-day.

Embarrass, Wisconsin.—March 20.—Saw the first robin this spring. Thunder at night in the southwest. 21, hard thunder-storm from 8 to 11 a. m. from southwest to northeast, with some hail and snow.

Green Bay, Wisconsin.—March 20.—A heavy thunder storm at 9.45 a. m. at the northwest to the north. 29th, ice broke up on the Fox river. 31st, ice broke up on the Green Bay lake.

Baraboo, Wisconsin.—March 20.—Heavy thunder with sharp lightning from southwest passing to northeast, from 2 to 4 a. m. 21th, robins made their first appearance. 22d, snow-drops, crocuses and tulips one to two inches in height. 23th, snow and ice passing rapidly away, making high water in Baraboo river, and all the small tributary streams, with but little damage. 28th, crocus in blossom. 30th, snow-drops in blossom.

Rural, Wisconsin.—March 11, sleighing very good in this vicinity yet. 18th, eight inches of snow fell from the 13th to last night. Such a heavy fall of snow in March has not been known here since 1857. The snow is now about three feet deep in the woods, which is more than at any previous time this winter. 20th, rain with thunder and lightning. 23d, the red-breasted robin, the first of the season, was seen here this morning.

Waupaca, Wisconsin.—March 23d, snow fast disappearing; ground bare in places. 28th, snow nearly all gone. 29th, robins first heard.

Geneva, Wisconsin.—March 14.—First thunder heard this year, distant; direction south. 18th, robins first seen. 28th, first wheat sown on the prairie.

Manitowoc, Wisconsin.—March 11.—First steamboat from Chicago. 28th, robins here.

Delavan, Wisconsin.—March 20.—Water very high in brook, higher than for seven years at least. 28th, anemone and crocus in blossom.

Beloit, Wisconsin.—March 19.—The snow disappeared, and robins made their appearance.

New Ulm, Minnesota.—March 23.—Ice in Minnesota river broken; teams cannot cross.

Beaver Bay, Minnesota.—March 25.—Northwest wind broke up the ice outside the points. 27th, northeast wind moved the flood ice towards the west end of Lake Superior. 29th, southwest wind moved the ice down the lake. 30th, all ice outside of the points gone out of sight.

Lyons, Iowa.—March 9.—One of the coldest, most blustering days of the winter; ice gorged at Clinton (two miles below) and the river frozen over. 10th, crossing on foot on the ice opposite the town. 18th, robins first seen; ice moving in the river. 21st, first boat up the river. 31st, this has been a windy, stormy, cold month, disagreeable and unhealthy beyond any month for several years.

Dubuque, Iowa.—March 19.—Ferry boat running through an opening in the ice. 21st, ice broken up and running with the current of the river. 29th, observed frost in a street excavation four feet below the surface of the ground. 31st, frost apparently disappeared from the ground.

Muscatine, Iowa.—March 1.—The ice started and moved out of the river. 6th, first robins made their appearance. 14th, thunder and lightning at 7 a. m.

Monticello, Iowa.—March 6.—Diffuse lightning in the southeast at midnight. 13th, a snow storm commenced at 11 a. m. At five in the evening rain began to fall with a temperature of 25°, which loaded everything with ice full half an inch in thickness, and made the best sleighing there has been during the winter. 14th, at 5 a. m. a thunder shower, with diffuse lightning, passed over with a southwest wind. 20th, a thunder shower passed southeast of here at eight o'clock this morning; the rivers uncommonly high at this time. 30th, ground frozen probably between three and four feet; it is thawed some eight or ten inches on the surface, so that farmers are harrowing in wheat in the mud.

Algona, Iowa.—March 20.—Some thunder in the southeast this morning. 26th, the river has broken up and ice is passing out fast; the river is bank full, snow all gone, except perhaps the remains of some heavy drifts; some shoots of grass are starting.

Waterloo, Iowa.—March 4.—Cedar river closed to-day. 6th, Cedar river opened. 20th, thunder from 5 to 7 a. m., the first this spring.

Iowa Falls, Iowa.—March 1.—Snow storm most of the day, rain in the evening and night; full eighteen inches of snow on the ground at this time; a violent wind and sudden change in the night; the thermometer fell from 34° above to 2° below zero in ten hours. 4th, the river closed again; crossing with teams. 20th, lightning and heavy thunder in the night. 22d, river broke up again; second ice, six inches thick, gorged in several places. 23d, river high; ice piled in large gorges, still rising. 28th, robins appeared. 31st, the ice all out of the river.

Fort Madison, Iowa.—March 12.—Robins came. 15th, ground frozen two feet deep.

Manhattan, Kansas.—March 10.—Kansas river frozen over so that men cross on the ice. 20th, diffused lightning at 3 a. m. in the N.NE. and at 7 a. m. in the east.

Bellevue, Nebraska.—March 9.—River closed with ice, crossing on foot; it had opened about the 22d of February; sudden cold, and this morning the coldest of the season by one degree. 22d, faint signs of grass growing, but the prevailing winds from the north retard vegetation.

Nursery Hill, Nebraska.—March 25.—Diffuse lightning at 6 a. m. far in the northwest. 27th, frost left the earth to-day. 28th, spring wheat mostly sown; crocus in bloom in open ground.

St. George, Utah.—March 17.—No frost in the ground since the 2d instant.

Sacramento, California.—Vegetation has been retarded by the cold weather experienced during the month, especially by the dry northwest winds, and rain is much needed by the agriculturists.

METEOROLOGY.

FROM THE SMITHSONIAN INSTITUTION.

APRIL, 1864.

Table showing the highest and lowest range of the thermometer, (with dates prefixed,) the mean temperature, and amount of rain, (in inches and tenths,) for April, 1864, at the following places, as given by the observers named. The daily observations were made at 7 o'clock a. m. and 2 and 9 p. m.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
MAINE.								
				°		°	°	*In.*
Steuben	Washington	J. D. Parker	27	61	17	29	41.1	5.40
Lee	Penobscot	Edwin Pitman	27	66	17	21	40.4	4.50
West Waterville	Kennebec	B. F. Wilbur	27	73	9	30	44.5	4.40
Gardiner	....do	Rev. F. Gardiner	27	70	26	31	44.9	4.43
Cornish	York	Silas West	27	73	4	28	44.4	3.50
Cornishville	....do	G. W. Guptill	27	74	9	32	44.9	4.04
NEW HAMPSHIRE.								
Exeter	Rockingham	Rev. E. Nason	28	75	.....	.....	.....	.....
Stratford	Coos	Branch Brown	27	68	9	23	39.7	3.24
Shelburne	....do	F. Odell	27	74	4	21	43.1	.....
Barnstead	Belknap	Chas. H. Pitman	27, 28	72	21	33	47.6	2.61
Claremont	Sullivan	S. O. Mead	27	74	4	26	45.9	.....
Do	....do	Arthur Chase	27	76	4	26	47.6	5.55
VERMONT.								
Lunenburg	Essex	Hiram A. Cutting	27, 28	70	2, 9	20	41.0	3.25
Craftsbury	Orleans	Jas. A. Paddock	26, 27	66	9	25	39.4	2.25
Middlebury	Addison	H. A. Sheldon	27	72	9	28	46.7	2.36
MASSACHUSETTS.								
Sandwich	Barnstable	N. Barrows, M. D	19, 26, 29	67	4	30	49.2	2.03
Topsfield	Essex	A. M. Merriam	28	75	4	37	50.2	2.00
Georgetown	....do	Henry M. Nelson	28	79	4	34	48.4	.....
Newbury	....do	Jno. H. Caldwell	28	80	4	35	49.2	.....
New Bedford	Bristol	Samuel Rodman	19	67	9	36	49.6	3.09
State L. Hospital	Worcester	F. H. Rice	27	79	4	32	50.3	2.51
Mendon	....do	Jno. G. Metcalf	27	79	24	33	50.2	3.25
Baldwinsville	....do	Rev. E. Dewhurst	28	74	9	28	45.6	3.75
Amherst	Hampshire	Prof. E. S. Snell	27	80	4, 9	33	49.0	2.90
Springfield	Hampden	J. Weatherhead	27	85	9	27	48.4	2.72
Westfield	....do	Rev. E. Davis	27	78	21	34	48.9	2.90
Richmond	Berkshire	Wm. Bacon	28	76	2	27	46.8	4.35

Table showing the range of the thermometer, &c., for April—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
CONNECTICUT.								
				°		°	°	*In.*
Pomfret	Windham	Rev. D. Hunt	27	77	9	31	48.6	2.88
Columbia	Tolland	Wm. H. Yeomans	27	80	3	33	51.5	.....
Middletown	Middlesex	Prof. John Johnston	27	84	9	35	51.8	3.41
Colebrook	Litchfield	Charlotte Rockwell	28	76	9	28	46.5	.....
NEW YORK.								
Moriches	Suffolk	Miss N. Smith	19	73	3	37	53.1	4.75
South Hartford	Washington	G. M. Ingalsbe	27	76	16	34	51.1	2.70
Fort Ann	do	P. A. McMore	27	82	23	39	54.9	4.70
Fishkill Landing	Dutchess	Wm. H. Denning	27, 28	78	3, 9	34	51.2	2.37
Garrison's	Putnam	Thomas B. Arden	27	77	3	33	52.0	3.00
Deaf & Dumb Inst.	New York	Prof. O. W. Morris	28	81	17	40	54.5	4.14
Columbia College	do	Prof. Chas. A. Joy	27	78	9	36	52.1	2.97
St. Xavier's College	do	Rev. Jno. M. Aubier	27	79	9	36	51.3	3.77
Flatbush	Kings	Eli T. Mack	27	75	3	36	50.8	4.24
Newburgh	Orange	Jas. H. Gardiner	28	79	8	37	51.1	2.20
Gouverneur	St. Lawrence	C. H. Russell	26	70	9, 24	27	44.8	3.13
South Trenton	Oneida	Storrs Barrows	28, 29	56	2, 8, 9, 22	28	40.1	7.20
Cazenovia	Madison	Prof. Wm. Soule	26	73	9	28	47.0	4.23
Oneida	do	Dr. S. Spooner	26	74	9	30	48.6	6.26
Sherburne	Chenango	Rev. J. R. Haswell	27	80	8, 9, 17	28	47.5	.....
Theresa	Jefferson	S. O. Gregory	26	72	9	29	45.2	3.73
Depauville	do	Henry Haas	6	66	9	27	46.2	.....
Oswego	Oswego	Wm. S. Malcolm	26	73	9	29	45.1	3.58
Palermo	do	E. B. Bartlett	26	75	9	27	45.2	2.70
Baldwinsville	Onondaga	John Bowman	26	68	9	28	45.6	.....
Skaneateles	do	W. M. Beauchamp	26	72	2, 3, 16	30	45.9	.....
Auburn	Cayuga	John B. Dill	26	80	3	32	52.1	.....
Nichols	Tioga	Robert Howell	26, 27	79	9	30	38.7	.....
Palmyra	Wayne	Stephen Hyde	26	76	9	32	49.9	.....
Geneva	Ontario	Rev. W. D. Wilson	6, 26	68	8	30	47.4	2.66
Rochester	Monroe	Prof. C. Dewey	26	74	8, 9	30	47.9	3.03
Do	do	Dr. M. M. Mathews	26	78	8, 9, 17	32	48.4	3.03
Warsaw	Wyoming	J. P. Morse	26	75	2	30	46.3	2.54
Buffalo	Erie	Wm. Ives	28	67	8	28	44.6	4.00
Jamestown	Chautauqua	Rev. S. W. Roe	26	76	17	27	48.0	4.30
NEW JERSEY.								
Paterson	Passaic	Wm. Brooks	27	79	3	37	53.4	3.89
Newark	Essex	W. A. Whitehead	27	79	9	35	53.0	3.34
Burlington	Burlington	John C. Deacon	27, 28	76	9	36	52.7	3.15
Moorestown	do	Thomas J. Beans	25	79	9	38	55.1	2.72
Mount Holly	do	Dr. M. J. Rhees	28	78	9	37	54.8	.....
Seaville	Cape May	Barker Cole	27	78	2	36	54.7	4.30
Haddonfield	Camden	J. S. Lippincott	27, 28	76	3, 9	39	54.4	2.80
Greenwich	Cumberland	R. C. Sheppard	27	76	9	40	55.2	2.86
PENNSYLVANIA.								
Fallsington	Bucks	Ebenezer Hance	28	77	9	39	54.0	1.40
Philadelphia	Philadelphia	Pf. J. A. Kirkpatrick	27, 28	78	9	40	55.9	2.83

Table showing the range of the thermometer, &c., for April—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
PENNSYLVANIA–C'd.				°		°	°	*In.*
Germantown	Philadelphia	Thos. Mcehan	27	81	2	37	.....	.....
Moorland	Montgomery	Anna Spencer	26	76	18	30	53.1	2.11
Dyberry	Wayne	Theodore Day	28	75	3	22	44.6	.....
Nazareth	Northampton	L. E. Ricksecker	26, 27	80	10, 23	37	53.2	.....
North Whitehall	Lehigh	Edward Kohler	26, 27	80	3	31	52.7	.....
Mount Joy	Lancaster	J. R. Hoffer	28	83	17	42	57.5	1.15
Harrisburg	Dauphin	Dr. John Heisely	27	81	9	40	55.7	2.24
Tioga	Tioga	E. T. Bentley	27	82	9	26	50.7	2.23
Pennsville	Clearfield	Elisha Fenton	6	74	17	28	47.1	3.42
Connellsville	Fayette	John Taylor	21	80	1	30	53.6	.....
Canonsburg	Washington	Rev. Wm. Smith, D.D	21	77	2, 17	28	51.3	2.20
DELAWARE.								
Wilmington	New Castle	Dr. Urban D. Hedges	27, 28	78	9, 17	38	55.2	2.40
MARYLAND.								
Woodlawn	Cecil	Jas. O. McCormick	27	74	10, 23	40	55.5	2.88
Annapolis	Anne Arundel	Wm. R. Goodman	27	76	17	40	56.8	2.98
St. Inigoes	St. Mary's	Rev. J. Stephenson	22, 26	76	23	45	59.4	3.48
Sykesville	Carroll	Miss H. M. Baer	26, 27	76	9, 10	40	53.4	3.25
SOUTH CAROLINA.								
Beaufort	Beaufort	Dr. M. M. Marsh	.....	.....	.....	.....	.....	.....
Hilton Head	....do	Capt. C. R. Suter	18, 20, 30	83	1	54	69.1	1.10
MISSISSIPPI.								
Natchez	Adams	Robt. McCary	18, 19, 20, 29	80	25	43	64.3	8.61
WEST VIRGINIA.								
Ashland	Cabell	C. L. Roffe	.....	.....	14	36	.....	.....
KENTUCKY.								
Louisville	Jefferson	Mrs. L. Young	4, 26, 27	77	8, 23	34	56.6	8.84
Chilesburg	Fayette	Samuel D. Martin	20	80	8	34	56.8	6.52
OHIO.								
Saybrook	Ashtabula	James B. Fraser	6, 21	75	16	25	48.1	.....
Austinburg	....do	E. D. Winchester	21, 26, 27	75	2, 7, 8, 9	32	44.7	3.25
New Lisbon	Columbiana	J. F. Benner	20	82	17	30	52.5	3.72
Welshfield	Geauga	B. F. Abell, A. M	27	77	8	29	49.3	3.97
Milnersville	Guernsey	Rev. D. Thompson	21	82	17	27	.....	2.88
Cleveland	Cuyahoga	Mr. & Mrs. G. A. Hyde	26	79	8	27	50.3	2.84
Cuyahoga Falls	Summit	Rev. D. M. Rankin	21	74	16, 23	30	.....	.....
Wooster	Wayne	Martin Winger	21	77	8	33	51.9	.....
Gallipolis	Gallia	A. P. Rogers	21	81	2, 8, 17, 23	38	56.2	2.33
Kelley's Island	Erie	Geo. C. Huntington	21	69	8	31	48.6	2.65
Norwalk	Huron	Rev. A. Newton	26	78	8	29	50.5	2.61
Westerville	Franklin	Prof. H. A. Thompson	26	74	7	33	54.0	3.77
Kingston	Ross	Prof. Jno. Haywood	20	80	8	34	55.3	2.53

Table showing the range of the thermometer, &c., for April—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
OHIO—Cont'd.				°		°	°	*In.*
Portsmouth	Scioto	L. Engelbrecht	21	77	23	38	58.1	2.45
Toledo	Lucas	Dr. J. B. Trembly	20	72	8	29	49.4	3.13
Marion	Marion	Dr. H. A. True	20, 27	76	8	30	51.8	.....
Urbana University	Champaign	Prof. M. G. Williams	27	78	8	30	53.1	6.92
Hillsborough	Highland	J. McD. Mathews	20	75	8	31	51.4	4.14
Ripley	Brown	Dr. G. Bambach	19	84	8, 23	37	57.8	8.27
Bethel	Clermont	Geo. W. Crane	19, 20, 21	80	8	32	52.2	4.70
Eaton	Preble	Miss Ollitippa Larsh	26, 27	74	8	34	53.0	.....
Cincinnati	Hamilton	Geo. W. Harper	20	81	23	34	56.4	3.89
College Hill	....do	John. H. Wilson	20, 27	76	8	32	54.5	6.35
Do	....do	John W. Hammitt	20	80	8	30	53.7	4.75
MICHIGAN.								
Pontiac	Oakland	Jas. A. Weeks	21, 25, 26	70	8	26	47.3	.....
Monroe	Monroe	Miss F. E. Whelpley	26	75	8	30	49.3	0.79
St. Agric. College	Ingham	Prof. R. C. Kedzie	20	71	8	26	47.4	2.32
Homestead	Benzie	G. E. Steele	25	73	8	19	41.7	.....
INDIANA.								
Vevay	Switzerland	Chas. G. Boerner	19	82	8	34	56.4	5.73
Pennville	Jay	Miriam Griest	19	83	8	24	55.0	.....
Richmond	Wayne	John Valentine	19	75	8	28	51.5	5.50
Spiceland	Henry	Wm. Dawson	19	79	8	26	52.5	3.60
New Albany	Floyd	Dr. E. S. Crozier	19	80	23	37	57.3	6.23
Indianapolis	Marion	W. W. Butterfield	19	80	8	25	52.4	.....
Rensselaer	Jasper	Dr. J. H. Loughridge	27	74	8	16	49.2	2.85
New Harmony	Posey	Jno. Chappellsmith	19	83	8	37	56.9	4.70
ILLINOIS.								
Chicago	Cook	Samuel Brookes	17, 24, 25	70	8	15	43.4	.....
Ottawa	La Salle	Mrs. E. H. Merwin	17	77	8	21	49.9	5.48
Winnebago	Winnebago	Jas. W. Tolman	25	75	8	14	46.8	4.33
Wyanet	Bureau	Miss & E. S. Phelps	17, 25	74	8	15	49.0	5.97
Tiskilwa	....do	Verry Aldrich	5, 25	70	8	18	49.4	.....
Elmira	Stark	O. A. Blanchard	17	76	8	19	50.1	4.44
Hennepin	Putnam	Smiley Shepherd	4, 25	60	8	2	35.3	.....
Peoria	Peoria	Frederick Brendel	19	75	8	22	51.7	4.27
Pekin	Tazewell	J. H. Riblett	19	80	8	22	50.8	5.88
Springfield	Sangamon	G. M. Brinkerhoff	19	88	8	32	55.3	.....
Waterloo	Monroe	H. Kunster	19	79	8	30	55.0	.....
Waverly	Morgan	Timothy Dudley	19	81	8	27	51.3	3.40
Murraysville	....do	Dr. & Miss Grant	19, 26	80	8	24	51.4	4.92
Galesburg	Knox	Pf. Wm. Livingston	17	74	8	20	48.0	4.65
Augusta	Hancock	S. B. Mead, M. D	19	81	8	23	50.0	5.77
Emerald Grove	Rock	.....	17	70	.....	.....	.....	.....
WISCONSIN.								
Manitowoc	Manitowoc	Jacob Lüps	14	68	8	18	42.5	2.53
Milwaukee	Milwaukee	I. A. Lapham, LL.D	24, 25	72	8	16	43.7	1.96
Do	....do	Carl Winkler	5, 24, 25	71	8	16	44.1	2.57

Table showing the range of the thermometer, &c., for April—Continued.

Place.	County.	Observer's name.	Date.	Max.	Date.	Min.	Mean.	Rain.
WISCONSIN—Con.								
				°		°	°	*In.*
Green Bay	Brown	Friedrich Deckner	25	74	8	13	41.7	4.02
Delavan	Walworth	Leveus Eddy	17	71	8	17	44.8	2.88
Waupacca	Waupacca	H. C. Mead	25	75	8	15	45.6	.....
Embarrass	....do	Edward E. Breed	25	76	8	16	41.5	.....
Rural	....do	John C. Hicks	25	73	7	18	44.0	7.93
Baraboo	Sauk	M. C. Waite	26	75	8	20	47.4	1.74
Beloit	Rock	Henry D. Porter	25	73	8	19	46.4	1.45
MINNESOTA.								
Afton	Washington	Dr. & Mrs. Babcock	24	76	8	5	42.8	.....
St. Paul	Ramsay	Rev. A. B. Paterson	24	77	8	8	44.2	4.29
Minneapolis	Hennepin	Wm. Cheney	24	77	7, 8	8	44.0	.....
New Ulm	Brown	Charles Roos	24	79	8	10	43.8	3.50
IOWA.								
Lyons	Clinton	P. J. Farnsworth, M.D	4	78	8	22	48.2	7.50
Dubuque	Dubuque	Asa Horr, M. D	25	75	8	13	47.4	3.92
Muscatine	Muscatine	J. P. Walton	4	75	8	15	44.1	6.00
Fort Madison	Lee	Daniel McCready	17	77	8	20	49.0	6.35
Monticello	Jones	Chauncey Mead	25	79	8	17	45.5	5.44
Guttenburg	Clayton	P. Dorweiler	25	72	8	18	45.2	.....
Mt. Vernon	Linn	Pf. Alonzo Collins	25	78	8	11	46.9	.....
Iowa City	Johnson	Pf. Theo. S. Parvin	25	75	8	20	48.1	9.31
Independence	Buchanan	A. C. Wheaton	25	77	8	11	45.8	4.70
Waterloo	Black Hawk	T. Steed	25	74	8	20	46.4	.....
Iowa Falls	Hardin	N. Townsend	24	74	8	13	44.0	3.52
Algona	Kossuth	Dr. F. & Miss McCoy	24	74	8	12	41.8	2.03
MISSOURI.								
St. Louis	St. Louis	Geo. Engelmann	26	81	8	33	54.9	3.31
Allenton	....do	A. Fendler	26	85	8	30	53.7	3.89
Athens	Clark	J. T. Caldwell	2	70	6	30	47.7	6.25
Canton	Lewis	Geo. P. Ray	19	83	8	26	51.0	8.88
Harrisonville	Cass	John Christian	4, 18, 19	76	6, 8	26	52.3	7.43
Charleston	Mississippi	Dr. E. A. Simpson	19	78	22, 23, 24	39	57.0	.....
KANSAS.								
Manhattan	Riley	.....	19	76	6, 23	27	54.7	2.03
Fort Riley	Davis	.....	25	86	7, 8	30	52.9	1.13
NEBRASKA TER.								
Elkhorn	Washington	John S. Bowen	24, 25	76	8	17	45.6	.....
Nursery Hill	Otoe	R. O. Thompson	25	84	6, 8	22	.....	6.73
Bellevue	Sarpy	Rev. Wm. Hamilton	25	74	6	19	46.5	2.65

Table showing the average temperature and fall of rain (in inches and tenths) for the month of April, for each of the years named, and for the five years first named, collectively, with the average number of places in each State in which the observations were made.

States and Territories.	Av. number of places.	Averages, 1855.		Averages, 1856.		Averages, 1857.		Averages, 1858.		Averages, 1859.		Av. for five years.		Averages, 1863.		Averages, 1864.		Averages, 1865.	
		Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.	Mean temp.	Mean rain.
		Deg.	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*	*Deg.*	*In.*
Maine	6	38.4	6.38	42.6	2.78	39.0	6.65	39.7	4.15	38.6	3.36	39.7	4.66	40.8	4.83	37.8	2.80	43.4	4.38
New Hampshire	4	42.2	4.73	44.3	2.20	39.9	6.22	41.0	2.94	36.1	2.73	40.7	3.76	42.3	3.16	40.1	2.12	44.8	3.80
Vermont	4	40.5	1.61	44.2	1.20	38.7	4.96	40.9	2.23	38.2	2.30	40.5	2.46	40.2	1.96	40.9	2.55	42.4	2.93
Massachusetts	12	43.6	4.95	45.4	3.23	41.8	7.25	45.1	3.29	42.9	3.46	43.7	4.44	44.8	4.22	42.2	2.30	48.8	2.95
Rhode Island	1	44.1	2.50	48.8	2.80	41.0	6.29	46.2	3.63	44.3	2.28	44.9	3.50	45.2	5.50	.....	.....	.....	.....
Connecticut	4	44.2	3.31	47.2	3.99	41.1	6.65	44.2	3.75	44.1	3.18	44.3	4.17	45.3	3.31	43.8	1.82	49.6	3.15
New York	18	44.4	2.78	47.2	2.39	39.1	5.88	45.8	3.26	43.3	4.97	44.0	3.86	43.8	3.28	45.9	3.52	48.2	3.71
New Jersey	4	49.1	1.85	50.4	2.60	42.8	6.94	48.9	3.95	46.9	5.00	47.6	4.07	48.2	5.84	48.4	3.75	54.2	3.29
Pennsylvania	19	49.7	2.29	50.2	3.51	41.3	4.13	49.2	3.73	48.4	5.36	47.8	3.81	46.3	6.91	46.9	4.25	52.5	2.20
Delaware	1	.....	.....	52.1	.....	50.1	.....	58.4	.....	.....	3.93	53.5	3.93	.....	.....	.....	.....	55.2	2.40
Maryland	4	54.7	1.32	52.9	2.90	47.5	3.12	50.9	3.82	50.8	5.11	51.3	3.26	47.7	5.13	49.3	6.14	56.3	3.15
District of Columbia	1	55.7	.....	54.7	2.68	45.3	2.40	53.4	3.66	52.2	4.69	52.3	3.36	49.6	6.82	43.0	6.82	.....	.....
South Carolina	5	64.9	0.89	64.6	0.63	56.5	2.92	64.2	2.59	62.9	2.48	62.6	1.90	.....	.....	63.5	1.69	69.1	1.10
Tennessee	2	64.9	3.25	59.4	4.18	49.7	5.72	60.1	4.86	57.9	5.79	58.4	4.76	57.7	3.27	58.3	.....	.....	.....
Kentucky	4	60.6	1.63	58.8	1.63	42.2	4.46	56.5	4.72	54.2	5.93	54.4	3.68	54.8	3.38	51.0	3.07	56.7	7.68
Ohio	20	55.9	2.30	53.2	1.67	40.1	3.01	51.0	4.80	47.8	5.65	49.6	3.49	48.3	1.74	47.8	3.23	52.4	3.94
Michigan	7	49.2	4.78	45.0	1.87	35.4	2.96	44.7	3.99	40.9	3.47	43.0	3.41	44.7	1.91	44.5	3.35	46.4	1.56
Indiana	5	57.1	5.02	56.5	0.81	42.1	2.15	53.9	5.19	49.6	5.13	51.9	3.66	52.2	2.63	48.8	4.24	53.9	4.77
Illinois	13	58.6	2.16	51.8	1.93	38.7	1.56	49.8	5.17	44.9	3.55	49.4	2.87	51.8	1.87	46.8	4.39	49.0	4.91
Wisconsin	9	50.2	2.03	45.7	3.04	35.4	2.45	42.6	4.32	36.0	4.28	42.0	3.22	45.0	1.21	40.7	2.35	44.2	3.14
Minnesota	3	51.9	.....	41.4	4.77	29.8	2.68	39.4	2.92	34.8	2.28	39.5	2.53	47.2	0.75	41.9	0.34	43.7	3.90
Iowa	8	55.6	2.27	51.7	3.33	36.8	1.35	46.5	5.48	37.7	3.34	45.7	3.16	50.2	1.07	45.7	3.58	46.0	5.42
Missouri	2	62.2	1.79	60.1	6.35	4.35	1.72	56.2	4.67	51.9	4.89	54.8	3.88	51.5	1.45	50.6	4.84	52.8	5.95
Nebraska Territory	2	.....	.....	.....	.....	.....	.....	48.2	5.05	41.4	1.64	44.8	3.31	53.1	0.75	45.8	2.40	46.0	4.69
Kansas	3	.....	.....	.....	.....	41.6	0.33	52.5	3.49	50.3	2.67	48.1	2.17	59.3	3.74	51.3	2.86	53.8	1.58
California	3	.....	.....	58.5	1.19	61.1	0.00	59.7	0.96	55.4	2.49	58.6	1.16	54.8	2.66	.....	.....	.....	.....

NOTES OF THE WEATHER APRIL, 1865.

A remarkable elevation, followed by a great depression of temperature, prevailed in the early part of the month, from about the 4th to the 9th. Neither time nor space is allowed for presenting all the phenomena connected with this change; a few observations are inserted in these notes, sufficient to draw attention to the fact and date of the occurrence.

Lee, Maine.—April 20.—First ground ploughed this spring.

Cornishville, Maine.—April 28.—Snow all gone; grass forward and flourishing; not winter-killed. The season appears to be three weeks more forward than usual.

West Waterville, Maine.—April 7.—Ice cleared from snow pond below the narrows. 13th, ice cleared in snow pond above the narrows.

Standish, Maine.—April 24.—Ice on still waters half an inch thick this morning; ground froze some.

Steuben, Maine.—April 1.—Snow all gone in open land, except drifts in shady places; frost mostly out of the ground except in hard-travelled roads. 26th, a white frost on everything. The warmest day of the month was the 6th, mean temperature 49⅔°; the coldest day the 9th, mean temperature 37⅓°.

Gardiner, Maine.—April 24.—Brilliant meteor in the west at 9 p. m., breaking into a multitude of brilliant fragments of different colors.

Lisbon, Maine.—April 29.—Farmers have sown considerable oats and grass seed, and some few have planted potatoes on light, early land. Many flowers appear ten days earlier this season than common.

Shelburne, New Hampshire.—April 1.—Some ploughing on dry land; grass just starting. 25th, ground frozen very hard. 26th, heavy frost, ground frozen. 30th, ground frozen in the intervals, in some places too much for ploughing.

Claremont, New Hampshire.—April has been rather a remarkable month on account of the very early opening of the spring. The ground was, in most places, as well settled and ready for the plough on the first of April as it usually is on the first of May.

Lunenburg, Vermont.—April 1.—Ice cleared out of the Connecticut river. 6th, snow mostly gone in the fields; no frost in the ground generally; but little in the roads.

New Bedford, Massachusetts.—April 27.—Cherry trees in blossom.

Mendon, Massachusetts.—April 30.—Peach, pear, and cherry trees in blossom; caterpillars in great numbers; the season is two to three weeks earlier than in 1864.

Topsfield, Massachusetts.—April 24.—Ice formed thickness of window glass. 30th, the season is about two weeks earlier than usual and somewhat dryer. Farmers are planting.

Westfield, Massachusetts.—April 28.—Peaches, plums, and cherries blooming. They are ten days earlier than in 1864.

Newbury, Massachusetts.—April 24.—Ice of considerable thickness. 25th, some ice; heavy white frost.

Georgetown, Massachusetts.—April 24.—Thermometer 29° at sunrise. Ice made a fourth of an inch thick; ground stiffened in some localities an inch in depth.

Sandwich, Massachusetts.—April 20.—Peach trees beginning to blossom; fifteen days earlier than in 1864, and fourteen days earlier than in 1863; in full bloom the 29th, being fourteen days earlier than in 1864, and seventeen days earlier than in 1863.

Columbia, Connecticut.—April 25.—Frost this morning.

Colebrook, Connecticut.—April 25.—Ground frozen; frost.

Palermo, New York.—The 6th of April was the warmest day of the month, and the 8th the coldest.

South Trenton, New York.—April 25.—Ground froze five-eighths of an inch this morning.

Theresa, New York.—The 6th was the warmest day of the month, mean temperature 62°; and the 8th the coldest, mean temperature 34½. Heavy frost on the 25th.

Garrison's, New York.—The weather throughout the month has been mild and favorable to agricultural operations. Oats and potatoes are in the ground twelve days in advance of last year.

Palmyra, New York.—April 6.—This was the warmest day of the month, mean temperature 65⅔°; the coldest the 8th and 9th, the mean temperature of each being 39⅓°. 9th, ice formed over three-eighths of an inch thick last night. 27th, cherry trees beginning to flower.

Jamestown, New York.—April 27.—Plum and cherry trees in bloom. 30th, pear trees in bloom; severe frost this morning; vegetation is at least ten days earlier than it was last spring.

Oneida, New York.—April 6 was the warmest day of the month, mean temperature 64⅔°.

Oswego, New York.—The warmest day of the month was the 6th, mean temperature 64°; the coldest day was the 8th, mean temperature 35°.

South Hartford, New York.—The month has been warmer than any preceding April for many years. No snow has fallen during the month in this vicinity. The first regular boat from Whitehall to Plattsburg, on Lake Champlain, ran on the 11th; water was let into Champlain canal on the 29th, and boats commenced running in a day or two.

Skaneateles, New York.—This month has been one of the finest Aprils ever known in this section. The warmest day was the 6th, mean temperature, 61⅔°; the coldest day the 8th, mean temperature 34°.

Gouverneur, New York.—April 25.—Heavy white frost last night. The warmest day of the month was the 6th, mean temperature 60°; the coldest day the 8th, mean temperature 33°.

Warsaw, New York.—There has been little or no frost in the ground this spring, owing to the depth of snow, which lay on the ground until nearly the 1st of April. This has not occurred here in many previous seasons. April 30, early cherries in bloom.

Fishkill on Hudson, New York.—April 21.—Cherries in bloom. 28th, pears and plums in bloom. 30th, early apples in bloom. Fruit trees in bloom seven days earlier than usual; grass very forward.

Rochester, New York.—April 24.—Ground frozen this morning, and early in the morning was covered with snow and ice. 27th, cherry trees in blossom. 28th, peach trees in blossom.

Vermilion, New York.—April 30.—This has been the warmest April in the last twelve years.

Baldwinsville, New York.—The 6th of April was the warmest day of the month, and the 9th the coldest.

Geneva, New York.—The warmest day of the month was the 6th, mean temperature 60°; the coldest the 8th, mean temperature 35⅓°.

Saville, New Jersey.—April 27.—Tulips are in full bloom and strawberries in their highest state of efflorescence, both being at least two weeks earlier than the observer ever saw before; cut the first mess of asparagus in the open air to-day.

Newark, New Jersey.—Of the preceding twenty Aprils only one had a mean temperature as high as the one just passed. No frost was observed during the month. From indications given by the flowering of the different fruit trees, the season is full two weeks earlier than in either of the last three years, and more or less in advance of every spring since 1845. Cherries and peaches first

developed their blossoms on the 15th, and were in full blossom three or four days thereafter. Plums put out on the 17th, and pears about the 26th.

Greenwich, New Jersey.—April 9.—Cherry trees in bloom; a plum tree in full bloom. 22d, apple trees in full leaf and bloom; currants and gooseberries nearly large enough for use. 28th, early sweet corn two inches high. 29th, currants large enough for use.

Paterson, New Jersey.—April 19.—Cherry trees in blossom. 22d, peach and pear trees in blossom. 25th, apple trees in blossom.

Haddonfield, New Jersey.—April 5.—Peach trees in bloom; peas above ground. 10th, cherry trees first observed in bloom (perhaps earlier.) 14th, Duchess pear in bloom, a dwarf, in a warm situation; other varieties partially expanded. 19th, pear trees in full bloom.

Siegfried's Bridge, Pennsylvania.—April 24.—Ice in still water; frost in some places. 25th, peaches and Missouri currants in full bloom. On the 27th plums, and on the 28th cherries in full bloom.

Dyberry, Pennsylvania.—April 4.—Snow banks nearly all gone and ice melted from natural ponds. 21st, to-night the first thunder of the season. 28th, during the past winter sixty-five inches of snow fell; average for the last eleven winters, fifty-three inches.

Germantown, Pennsylvania.—April 26.—All vegetation is much earlier this spring than usual.

Tioga, Pennsylvania.—The 6th was the warmest, and the 8th the coldest day of the month. April 11, began sowing oats. 12th, planted potatoes, peas, &c. 17th planted field potatoes. 30th, plums and cherries in bloom; oats two inches high. April was warm and dry up to the 27th; more than an inch and a half of rain fell on the 28th and 29th. Much more farm labor has been performed than is usual in this month; grass two weeks in advance of ordinary seasons.

Nazareth, Pennsylvania.—April 23.—Cherry trees in blossom.

Horsham, Pennsylvania.—April 24.—Thermometer 36° early in the morning, but no white frost; ground a little frozen in some low places. 30th, vegetation generally is from ten days to two weeks earlier than average seasons.

Fallsington, Pennsylvania.—Vegetation and blooms are supposed to be about two weeks earlier than usual. The mean temperature of the month, 54°, is the highest for April since the observer has kept a register (1849.) The highest previously was 51°, in 1856. Although there has been considerable damp weather in the month the amount precipitated is the least of any April on the record.

Canonsburg, Pennsylvania—April 24.—Apple trees in full bloom.

Philadelphia, Pennsylvania.—April 29.—At 5½ p. m., one clap of thunder and one flash of lightning, the first observed this year.

Woodlawn, Maryland.—April 22.—Apple trees in full bloom.

Sykesville, Maryland.—April 7, Peach trees, 8th strawberries, 9th cherry trees, in bloom. 22d, apple trees in bloom. 24th, frost in the valley.

Chilesburg, Kentucky.—April 18.—Apple trees in bloom.

Kelly's Island, Ohio.—April 23.—Ice the thickness of paper in exposed situations. 30th, cherries and peaches just coming into bloom; temperature of lake, 50°.

Urbana, Ohio.—April 17th to 20th.—Plum, cherry, peach, pear, successively in bloom. 23d, thin ice. 27th, apple in bloom.

Hillsboro', Ohio.—April 5.—Early cherries blooming. 6th, peach blossoms coming out.

Austinburg, Ohio.—April 11.—First thunder shower of the season.

New Lisbon, Ohio.—April 20.—Peaches, cherries, and plums in bloom. 23d, snow nearly all day. 29th, apples in bloom. The warmest day of the month

was the 6th; mean temperature, 71°. The coldest day (except the 23d) was the 8th; mean temperature, 38°. The 23d was two-thirds of a degree lower.

Bethel, Ohio.—April 4—Peach trees beginning to bloom. 23d, light frost.

Welshfield, Ohio.—Strawberries in bloom on the 24th, pear on the 25th, cherry on the 26th, peach the 27th; apple not in bloom yet.

Wooster, Ohio.—April 24—White frost this morning; thermometer 31°.

Marion, Ohio.—April 6.—Peach blossoms begin to show; 16th, half opened. 19th, 20th, 21st, cherries, plums, pears, successively, in full bloom. 27th, apples in full bloom.

Saybrook, Ohio.—April 23.—Snow about an inch deep on the ground this morning; it fell last night.

Pontiac, Michigan.—April 8.—Ice three-quarters of an inch thick. 10th, two inches of snow last night. 23d, snow squall 2 p. m. 24th, frost.

Monroe, Michigan.—The average temperature of Apirl has been high, with but little frost; vegetation two or three weeks earlier than the average of four or five years back.

Lansing, Michigan.—Thermometer fell from 61° at 7 a. m. of the 6th to 31° at 7 a. m. of the 7th, being thirty degrees in twenty-four hours.

Indianapolis, Indiana.—April 4.—First blossoms of the peach tree.

Rensselaer, Indiana.—April 8.—Ice nearly an inch thick. 23d, heavy frost; ice three-quarters of an inch thick; ground frozen quite hard. 25th, cherry and pear trees in full bloom; peaches were all killed in the winter. The warmest day of the month was the 5th, mean temperature 64°: the coldest day was the 8th, three days later, mean temperature 26°. The highest and lowest temperature during this period was 70° at 2 p. m. on the 5th, and 16° at 7 a. m. on the 8th—a fall of fifty-four degrees.

Veray, Indiana.—April 5.—Violent gale from the south at 6 p. m.; continued till 7 a. m. next morning.

Spiceland, Indiana.—April 23.—Snowed half an inch last night and this morning. 25th, apple trees blooming.

Pennville, Indiana—April 21.—Peaches, cherries, pears, currants, and gooseberries in full bloom, and remarkably full of blossoms. Fruit generally is very forward. 23d, ice an eighth of an inch thick. 26th, first apple blossoms.

New Albany, Indiana.—April 6.—Pear trees in bloom. 8th, white frost, but resulted in no damage to the fruit in this neighborhood.

Augusta, Illinois.—April 17.—Red currant and gooseberry in blossom; 18th, peach and Japan quince begin to bloom; 19th, pear, May cherry, and green gage plum begin to bloom; 20th, strawberry begins to blossom in garden; 25th, apple trees, wild plum, and morella cherry in blossom.

Murraysville, Illinois.—April 23.—Hard frost this morning; ice full a quarter of an inch thick.

Winnebago, Illinois.—April 5.—Heavy rain from 5 to 7.30 a. m., with considerable thunder and lightning about the time of beginning; wind from the south all day. 6th, the wind changed to west soon after midnight; force, from 7 to 8; at 10 this morning changed to southwest and continued blowing a heavy gale through the day and following night; 7th, the wind gradually abated and cold increased during the day; 8th, ground frozen from two to three inches this morning.

Wyanet, Illinois.—April.—4th and 5th were the warmest days of the month, mean temperature of each 64°; the coldest day was the 8th, mean temperature 28⅓°. On the 8th, a large pond, three acres, frozen over; ground frozen two two inches deep.

Ottawa, Illinois.—The 5th of April was the warmest day of the month, and the 8th the coldest; ice an eighth of an inch thick on the morning of the 7th, and an inch and a quarter on the 8th. 22d, ground wet with snow this morning; ice formed an eighth of an inch thick.

Tiskilwa, Illinois.—April 30.—From indications, the wet season is fairly beginning. The month has been remarkably pleasant, with good roads, dry and hard until within a week or so. Spring grain got in seasonably and in good order, being warm and occasionally light showers. It came up quick and extremely well. The warmest day of the month was the 5th, and coldest the 8th.

Athens, Illinois.—There has been an uncommon amount of rain this April, so that all roads are very near impassable, and all streams unusually high and rising to this time (May 1,) and a probability of a wet season. All farmers are very backward, more so than for many years.

Waverly, Illinois.—April 23d.—A severe frost, with cherry, peach, and plum trees in full blossom. 27th, blossom of the apple.

Chicago, Illinois.—The warmest day in April was the 5th, mean temperature 60°; the coldest day the 8th, mean temperature 25°.

Canton, Missouri.—Thermometer 60° at 7 a. m. of the 5th, and 30° at the same hour next day. Ice on the morning of the 22d and 23d. 19th, peaches just blossoming; 25th, peaches and plums in full blossom; 27th, Missouri currants in blossom; 28th, strawberries in bloom.

Harrisonville, Missouri.—April 5th.—Temperature at 7 a. m, 60°; 6th, temperature at 7 a. m., 26°; 18th, plums, peaches, and cherries in blossom; 27th, early apples in bloom; 29th, no account of damage from frost yet.

Allenton, Missouri.—Some of the strawberry and pear blossoms are said to have been injured by the severe frost on the morning of the 23d.

Rural, Wisconsin.—April 10.—Steamboats on Wolf river made the first trip of the season to-day. 24th, eight inches of snow fell from the morning of the 20th to the afternoon of the 22d; the ground being warm it melted fast. It has now disappeared. The Wolf and Waupaca rivers are both very high. Before the snow they were as high as they have been for some years, and are rising still.

Embarrass, Wisconsin.—April 2.—Frost all out of the ground. 6th, thunder storm from southwest, from 3 to 6 a. m. Violent gale or tornado accompanied the thunder storm, commencing about 4 a. m., with a deafening crash, tearing up trees and taking the roofs off from houses and barns. In some places thirty or forty acres are turned over or twisted off. It continued till 9 a. m. The ground froze to the depth of three inches before morning.

Green Bay, Wisconsin.—April 6.—At 5 a. m. a gale sprung up from SW. and S.SW., and continued till after midnight. The strength of some of the buildings along the Fox river, on both sides, was pretty well tested, but no serious damage was done. Trees were blown down across the roads and telegraph lines. On the bay the wind broke up and cleared out the ice. In the river the water was unprecedentedly low, falling nine feet below ordinary water mark, and leaving the bed of the river almost bare nearly to the edge of the channel. There was probably not water enough for a loaded propeller to land at any dock on either side of the river.

Lyons, Iowa.—The warmest day in April was the 5th, mean temperature 64⅔°, and the coldest day the 7th, mean temperature 26⅓°.

Iowa Falls, Iowa.—April 6.—Yesterday was warm, with a strong wind from the south all day. About midnight the wind changed to the southwest, and blew a hurricane till morning, and all through this day. The temperature fell 29° in nine hours.

Monticello, Iowa.—April 5 and 6.—The temperature fell from 2 p. m. of the 5th to the same hour on the 6th 36°, or from 68° to 32°. On the morning of the 8th the ground was frozen two and a half inches, temperature 8° at sunrise. Five inches of snow fell on the 21st and 22d, which is of rare occurrence so late in the spring, but it nearly all disappeared on the 23d.

Fort Madison, Iowa.—April 22.—Cherry and peach in blossom in favorable locations. 25th, apple in blossom.

Waterloo, Iowa.—The warmest day of the month was the 4th, mean temperature 59°; the warmest the 7th, mean temperature 25⅓°. Snow from about 10 o'clock of the night of the 20th to late in the night of the 21st. On the 22d the depth of the snow could not be less than eighteen inches; drifts five feet deep. 23d, snow drifts all gone.

Guttenberg, Iowa.—April 5.—Thermometer at 2 p. m. 65°; at the same hour next day 31°. 6th, frost sets in again; field work totally suspended. 8th, temperature at 5 a. m., 14°. 13th, field work resumed again, ground open. 21st, snow fell to the depth of twelve inches; field work suspended for several days. 29th, the weather during the month was very changeable, and not well suited to the spring work on a farm.

Muscatine, Iowa.—April 1.—Frost out of the ground. 4th, the warmest day of the month, mean temperature 64⅓°. 8th, coldest day of the month, mean temperature 26°. Snow squalls on the 21st and 22d; ground whitened with snow on the 22d at 6 a. m. 23d, ice in a tub in the yard, half an inch thick. 25th, grass enough on the prairies for cattle to live on. 28th, cherries in blossom; apples considerably injured by the late frost.

Iowa City, Iowa.—April 5 was the warmest day of the month; mean temperature 63°. 7th, the coldest day; mean temperature 28⅓°. On the 21st a violent snow storm, snow an inch deep. 22d, thermometer 36° at 2 p. m.; at the same hour next day 62°; frost on the 30th. The month was very wet; no April showers, but frequent hard rains.

Dubuque, Iowa.—April 5.—Thermometer 71° at 2 p. m.; 34° at the same hour next day. On the 5th the wind was from the south all day, blowing a gentle breeze early in the morning, gradually increasing through the day, and at 9 p. m. being a high wind; during the night it changed to southwest, and blew a severe gale all night and part of the next morning; it then changed to west and continued a strong gale from that quarter all the remainder of the day and on the 7th was all day from the west, gradually moderating. At 7 a. m. of the 8th the temperature had fallen to 13°, the minimum of the month. On the 21st and 22d six inches of snow fell.

Afton, Minnesota.—April 1.—Frost disappeared from the ground in favored locations. 26th, frost entirely out of the ground.

New Ulm, Minnesota.—Six inches of snow fell from 4 a. m. of the 6th to 5 a. m. of the 7th. One-sixteenth of an inch of snow fell on the 21st.

St. Paul, Minaesota.—On the 4th the temperature was 62° at 2 p. m., 49° at 2 p. m. the 5th, and 21° at the same hour on the 6th. The mean temperature of the 7th was 15⅓°, the coldest day of the month.

Richland, Nebraska.—April 1.—Frost generally all out of the ground; green grass starting over the prairies. A very little snow on the 6th and 8th. Ice on the 22d and 23d.

Bellevue, Nebraska.—The month of April has been so cool that grass grew but little; no pasture of any account, nor leaves on the trees till the first of May.

METEOR.

A brilliant meteor, breaking into fragments of various colors, was observed at various places in New England, and also at Wooster, Ohio, on the evening of Monday, the 24th of April. Any persons having information respecting this meteor are requested to communicate it to the Smithsonian Institution.

Mean temperature from 1831 *to* 1864, *inclusive; also the amount of snow that has fallen during the same period. Record kept by General Peleg Wadsworth, Hiram, Me.* (*Altitude,* 400 *feet above tide-water; latitude,* 43° 51′; *longitude,* 70° 49′) *Reductions made by Geo. Wadsworth, civil engineer.*

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean for year.	Snow, ft. & in.
	°	°	°	°	°	°	°	°	°	°	°	°	°	
1831	9⅜	18	34	45	55	69	69	68	59	50	34	8	43⅜	9. 08
1832	16	17	28	36	49	61	65	66	58	47	34	20	41½	9. 05
1833	20	15	25	43⅜	55	57	68	61	54	43	31	27½	42½	6. 00
1834	13¾	14	29½	42	49⅜	60	66⅜	62	64	43	34	20	42	6. 11
1835	18	15	26⅜	38	52	63	68	62	52⅜	49	32	15	41	9. 05
1836	19	13½	27	37	52	59	66	59	55	38	31	21	39 5-6	8. 02
1837	9	16⅜	28⅜	39	48	61	66	61	53	41	31	20	39½	4. 06
1838	24½	13	29	35⅜	44½	63	67	63½	55⅛	41⅜	28⅜	15	40	5. 03
1839	17⅛	22	30	42	50⅜	56⅜	69	64	57	43⅜	31⅜	24	42½	6. 11
1840	9⅜	27	29½	43⅜	54⅛	60	68⅜	67	56	45	32½	19	42⅜	10. 01
1841	16	23	25	36	51⅜	65	66	67	61	41	32	25	42½	5. 04
1842	20	26	32⅜	41½	48⅜	60½	68	66	55	43	31½	18	42⅜	13. 09
1843	26½	12	23½	40	51½	61	64	65⅜	57⅜	46	30	24	41½	8. 03
1844	10	19½	31	47½	54	61	72	61	55	43	32½	22½	42½	9. 08
1845	21	19	30	38	52	61½	67	65	52	46	37	16⅜	42	6. 04
1846	18	13	32⅜	44½	54	61½	66	67½	62	43	38	21	43½	7. 02
1847	17⅜	21	24	35½	50½	60½	68⅜	64	54	41⅜	38⅛	31	42¼	6. 10
1848	21½	22	26⅜	41	55	61	66	65½	52½	46	32	28½	43½	.....
1849	14⅜	12	32	37½	50	65⅜	69	65⅜	55½	43½	40⅜	21½	42¼	.....
1850	18	22	28	37	46½	64	69	60	59	46	34	19	42	.....
1851	17⅜	23	31	39	49½	56⅜	63	63	54	48	29	16	40⅜	12. 03
1852	20	19	25⅜	37	54	61½	66½	64	57	44	32⅜	33	42 5-6	6. 06
1853	23	21	29⅜	40	52½	63	67	64	57½	41	33½	19	43½	11. 03
1854	14	14	25½	36	54⅜	62⅜	70⅜	64	57½	47½	25⅜	18	41⅜	10. 03
1855	20	13½	29⅜	37⅞	50⅜	60½	70⅜	63⅜	56	47	35⅜	24	42½	6. 02
1856	8	15⅝	22	41	51	65½	68⅜	64⅜	58⅜	47	31⅜	17⅜	41	7. 07
1857	8⅜	25	27⅜	38	51	60	67½	62	56½	44	34⅜	25⅜	41⅜	6. 01
1858	20½	13½	26⅜	38⅜	46⅜	63½	65	62½	55⅜	44½	27⅜	20⅜	40½	8. 10
1859	15⅜	18⅜	32⅜	35⅜	58⅜	59⅜	65½	64	54⅜	41	33½	16	41½	8. 09
1860	21	19	32	40⅜	52	61	63⅜	64⅜	55	45	38	19½	42½	10. 02
1861	14	23	23⅜	36⅜	48	60	64	63	56⅜	48	34	23½	41	10. 07
1862	14⅜	15⅜	30	37⅜	53	58	66⅜	68½	58½	48	34	20½	42	10. 10
1863	22	18⅜	21⅜	40	53½	60½	68⅜	65	55	48⅜	37½	19	42	6. 00
1864	20	25⅜	29	37⅜	53⅜	62	67½	66⅜	53	41	34⅜	22½	41½	.....
Average	17	18½	28 1-5	39¼	51 2-9	61⅜	67 1-6	64 1-7	56 1-6	46	33½	21	42	8. 3½